CC The invention describes an isolated secereted and transmembrane PRO
CC polypeptide (I). PRO polypeptide such as PRO213, PRO700, PRO320 or PRO615
CC is useful in biotechnological and medical research, as well as in various
CC industrial applications. PRO polypeptide such as PRO300, PRO866, PRO703,
CC PRO708, PRO320, PRO351, PRO352, PRO381, PRO615, PRO618, PRO772, PRO853,
CC PRO860 or PRO846 is useful for therapeutic purposes. PRO363 is useful
CC therapeutically in vivo for lessening the effects of viral infection.
CC PRO200 is useful for the treatment of wound healing, tissue growth and
CC muscle generation and regeneration. PRO337 is useful for treating
CC amyotrophic lateral sclerosis, neuropathy, AIDS-associated neuropathy or
CC diabetic peripheral neuropathy. A polynucleotide (II) encoding (I) is
CC useful for generating transgenic animals or knockout animals which are
CC useful in the development and screening of therapeutically useful
CC reagents, as probes for generating a pool of sequences for identifying
CC related PRO coding sequences, and to construct hybridisation probes for
CC mapping the gene which encodes the PRO and for the genetic analysis of
CC individuals with genetic disorders, for recombinantly expressing (I) and
CC for chromosome identification. (I) is useful as molecular marker for
CC protein electrophoresis purposes, and as therapeutic agents. (I) is also
CC useful for screening compounds to identify those that mimic the PRO
CC polypeptide (agonists) or prevent the effect of the PRO polypeptide
CC (antagonists). (I) and (II) are useful for tissue typing. PRO antibodies
CC are useful for immunohistochemical staining and/or assay of sample
CC fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g.
CC detecting its expression in specific cells, tissues or serum, and for
CC affinity purification of PRO from recombinant cell culture or natural
CC sources. This sequence represents a human secereted and transmembrane PRO
CC protein associated primer.
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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ID ADC68610 standard; DNA; 18 BP.
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AC ADC68610;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003064407-A1.
XX
PD 03-APR-2003.
XX
PF 24-OCT-2001; 2001US-00999834.
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PR 17-OCT-1997; 97US-0062250P.
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PR 11-MAR-1998; 98US-0077632P.
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XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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XX
DT 18-DEC-2003 (first entry)
XX
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XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
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XX
PD 10-APR-2003.
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PR 30-JUL-1998; 98US-0094651P.
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PR 10-MAR-2000; 2000WO-US006319.
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PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-695924/66.
XX
PT New isolated secreted and transmembrane PRO polypeptides, useful in the
PT preparation of a medicament for treating a condition responsive to the
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX
PS Example 4; SEQ ID NO 14; 467pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity

CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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AC ADC67735;
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DT 18-DEC-2003 (first entry)
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XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003069178-A1.
XX
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PR 22-DEC-1998; 98US-0113296P.
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PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
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PR 02-JUN-1999; 99WO-US012252.
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PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
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PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
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PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
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PR 21-MAR-2000; 2000WO-US007532.
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PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-657582/62.
XX
PT Novel secreted and transmembrane polypeptides, designated PRO
PT polypeptides, and polynucleotides encoding them useful for treating
PT kidney diseases, bone, cartilage and retinal disorders.
XX
PS Example 4; SEQ ID NO 14; 468pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
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Db 18 GAACTCCGTGGCGG 5

RESULT 701
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ID ADC41055 standard; DNA; 18 BP.
XX
AC ADC41055;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003072745-A1.
XX
PD 17-APR-2003.
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PF 25-OCT-2001; 2001US-00013929.
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PR 17-OCT-1997; 97US-0062250P.
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PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98US-0109304P.
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PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
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PR 21-APR-1999; 99US-0130232P.
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PR 26-JUL-1999; 99US-0145698P.
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PR 24-FEB-2000; 2000WO-US005004.
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PR 21-MAR-2000; 2000WO-US007532.
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PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
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PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
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PA (GETH) GENENTECH INC.
XX
PI Ashkenazi A, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-743806/70.
XX
PT Novel isolated secreted and transmembrane PRO polypeptides, useful in the
PT preparation of a medicament for treating a condition responsive to the
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX
PS Example 4; SEQ ID NO 14; 466pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993

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CC   polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC   Similarly, PRO4993 polypeptide is useful for detecting PRO337

  Query Match           2.9%;  Score 12.4;  DB 1;  Length 18;
  Best Local Similarity   92.9%;  Pred. No. 4.3e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

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Db         18 GAACTCCGTGGCGG 5


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AC   ADC67110;
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DT   18-DEC-2003  (first entry)
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DE   Human PRO 274 PCR primer #4.
XX
KW   vulnerary; virucide; neuroprotective; cytostatic; gene therapy;
KW   tumour cell proliferation inihibitor;
KW   secereted and transmembrane protein; PRO; viral infection; wound healing;
KW   tissue growth; muscle generation; muscle regeneration;
KW   amyotrophic lateral sclerosis; neuropathy; AIDS-associated neuropathy;
KW   diabetic peripheral neuropathy; chromosome identification; antagonist;
KW   tissue typing; immunohistochemical staining; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2003073131-A1.
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PD   17-APR-2003.
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PF   25-OCT-2001; 2001US-00016177.
XX
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PR   22-APR-1998;   98US-0082704P.
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PR   05-JAN-1999;   99WO-US000106.
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PR   10-MAR-1999;   99WO-US005190.
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PR   29-MAR-1999;   99US-0126773P.
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PR   26-APR-1999;   99US-0131022P.
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PR 14-MAY-1999; 99US-0134287P.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
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PR 07-JUL-1999; 99US-0142680P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
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PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-743810/70.
XX
PT Novel isolated secreted and transmembrane PRO polypeptides, useful in the
PT preparation of a medicament for treating a condition responsive to the
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX
PS Example 4; SEQ ID NO 14; 464pp; English.
XX
CC The invention describes an isolated secereted and transmembrane PRO
CC polypeptide (I). PRO polypeptide such as PRO213, PRO700, PRO320 or PRO615
CC is useful in biotechnological and medical research, as well as in various
CC industrial applications. PRO polypeptide such as PRO300, PRO866, PRO703,
CC PRO708, PRO320, PRO351, PRO352, PRO381, PRO615, PRO618, PRO772, PRO853,
CC PRO860 or PRO846 is useful for therapeutic purposes. PRO363 is useful
CC therapeutically in vivo for lessening the effects of viral infection.
CC PRO200 is useful for the treatment of wound healing, tissue growth and
CC muscle generation and regeneration. PRO337 is useful for treating
CC amyotrophic lateral sclerosis, neuropathy, AIDS-associated neuropathy or

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
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Db 18 GAACTCCGTGGCGG 5

RESULT 703
ADC62046/c
ID ADC62046 standard; DNA; 18 BP.
XX
AC ADC62046;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003073624-A1.
XX
PD 17-APR-2003.
XX
PF 15-OCT-2001; 2001US-00978193.
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PR 05-JAN-1999; 99WO-US000106.
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PR 10-MAR-1999; 99WO-US005190.
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PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
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PR 28-JUL-1999; 99US-0146222P.
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PR 30-DEC-1999; 99WO-US031274.
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PR 04-FEB-2000; 2000US-0180165P.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000US-00709238.
PR 27-NOV-2000; 2000US-00723749.
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PR 20-DEC-2000; 2000US-00747259.
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PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
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PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
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Db 18 GAACTCCGTGGCGG 5

RESULT 704
ADC13477/c

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ID   ADC13477 standard; DNA; 18 BP.
XX
AC   ADC13477;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Kaposi's sarcoma tag PCR primer, SEQ ID No 144.
XX
KW   marker gene; tumour; Kaposi's Sarcoma; peripheral blood mononuclear cell;
KW   PBMC; expressed keratin 14; TIE 1; Salioadhesin; Siglec 1; angiogenesis;
KW   drug target; tag; SAGE library; KS3; KS4; PCR; primer; ss.
XX
OS   Unidentified.
XX
PN   EP1298221-A1.
XX
PD   02-APR-2003.
XX
PF   28-SEP-2001; 2001EP-00203703.
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PR   28-SEP-2001; 2001EP-00203703.
XX
PA   (PRIM-) PRIMAGEN HOLDING BV.
XX
PI   Van Der Kuyl AC,  Cornelissen M;
XX
DR   WPI; 2003-589342/56.
XX
PT   Determining whether a treatment is effective in changing a status of a
PT   certain set of target cells in an individual comprises determining
PT   whether the sample comprises an expression product of at least one marker
PT   gene.
XX
PS   Disclosure; SEQ ID NO 144; 94pp; English.
XX
CC   The invention relates to a novel method for determining whether a
CC   treatment is effective in changing a status of a certain set of target
CC   cells in an individual. The method comprises obtaining a sample from an
CC   individual after initiation of the treatment; and determining whether the
CC   sample comprises an expression product of at least one marker gene. The
CC   marker gene and a proteinaceous molecule (which can bind to the protein
CC   derived from the marker gene of the invention) are useful for determining
CC   whether a treatment is effective in counteracting a tumour in an
CC   individual, especially Kaposi's Sarcoma. Peripheral blood mononuclear
CC   cell (PBMC) expressed keratin 14, TIE 1, Salioadhesin, or Siglec 1
CC   sequences or a fully defined sequence given in the specification, or
CC   their analogues are useful as indicators for angiogenesis and for
CC   detecting the presence of a tumour cell in an individual. The expression
CC   product of a gene comprising a marker gene of the invention is useful as
CC   a drug target. The compound is useful for preparing a medicament. This
CC   polynucleotide sequence represents a PCR primer of a Kaposi's Sarcoma tag
CC   sequence of the invention.
XX
SQ   Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 18;
  Best Local Similarity   92.9%;  Pred. No. 4.3e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        288 AAGCTGGTGAAGGA 301
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Db         18 AAGCTGCTGAAGGA 5


RESULT 705
ADC41679/c
ID   ADC41679 standard; DNA; 18 BP.
XX
AC   ADC41679;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human PRO 274 PCR primer #4.
XX
KW   Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW   ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW   auditory; tumour growth; retinal disorder; sports-related joint problem;
KW   articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW   wound healing; hearing loss; primer.
XX
OS   Homo sapiens.
XX
PN   US2003104998-A1.
XX
PD   05-JUN-2003.
XX
PF   16-OCT-2001; 2001US-00978643.
XX
PR   17-OCT-1997;   97US-0062250P.
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PR   21-NOV-1997;   97US-0066364P.
PR   10-MAR-1998;   98US-0077450P.
PR   11-MAR-1998;   98US-0077632P.
PR   11-MAR-1998;   98US-0077641P.
PR   11-MAR-1998;   98US-0077649P.
PR   12-MAR-1998;   98US-0077791P.
PR   13-MAR-1998;   98US-0078004P.
PR   17-MAR-1998;   98US-00040220.
PR   20-MAR-1998;   98US-0078886P.
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PR   20-MAR-1998;   98US-0078936P.
PR   20-MAR-1998;   98US-0078939P.
PR   25-MAR-1998;   98US-0079294P.
PR   26-MAR-1998;   98US-0079656P.
PR   27-MAR-1998;   98US-0079663P.
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PR   27-MAR-1998;   98US-0079786P.
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PR   15-APR-1998;   98US-0081952P.
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PR   21-APR-1998;   98US-0082568P.
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PR 02-NOV-1998; 98US-00184216.
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PR 10-MAR-1999; 99US-00265686.
PR 10-MAR-1999; 99WO-US005190.
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PR 28-JUL-1999; 99US-0146222P.
PR 25-AUG-1999; 99US-00380137.
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PR 25-AUG-1999; 99US-00380142.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000US-00709238.
PR 27-NOV-2000; 2000US-00723749.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
PR 22-MAR-2001; 2001US-00816920.
PR 22-MAR-2001; 2001WO-US009552.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy        215 GAACTCGGTGGCGG 228
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Db         18 GAACTCCGTGGCGG 5
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RESULT 706
ADE49048/c
ID ADE49048 standard; DNA; 18 BP.
XX
AC ADE49048;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX

OS Homo sapiens.
XX
PN US2003096744-A1.
XX
PD 22-MAY-2003.
XX
PF 28-JAN-2002; 2002US-00978187.
XX
PR 17-OCT-1997; 97US-0062250P.
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PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
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PR 13-MAR-1998; 98US-0078004P.
PR 17-MAR-1998; 98US-00040220.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078910P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
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PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
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PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 31-MAR-1998; 98US-0080105P.
PR 31-MAR-1998; 98US-0080165P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080328P.
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PR 09-APR-1998; 98US-0081195P.
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PR 15-APR-1998; 98US-0081838P.
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PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
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PR 28-APR-1998; 98US-0083322P.
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PR 29-APR-1998; 98US-0083554P.
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PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 06-MAY-1998; 98US-0084441P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
PR 07-MAY-1998; 98US-0084637P.
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PR 07-MAY-1998; 98US-0084640P.
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PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
PR 15-MAY-1998; 98US-0085573P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-0085697P.
PR 15-MAY-1998; 98US-0085700P.
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PR 22-MAY-1998; 98US-0086392P.
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PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086486P.
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PR 28-MAY-1998; 98US-0087106P.
PR 28-MAY-1998; 98US-0087208P.
PR 26-JUN-1998; 98US-00105413.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98US-00168978.
PR 07-OCT-1998; 98WO-US021141.
PR 02-NOV-1998; 98US-00184216.
PR 06-NOV-1998; 98US-00187368.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.
PR 07-DEC-1998; 98US-00202054.
PR 22-DEC-1998; 98US-00218517.
PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 05-MAR-1999; 99US-00254465.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99US-00265686.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-00267213.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 12-APR-1999; 99US-00284291.
PR 21-APR-1999; 99US-0130232P.
PR 26-APR-1999; 99US-0131022P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-00311832.
PR 14-MAY-1999; 99US-0134287P.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 25-AUG-1999; 99US-00380137.
PR 25-AUG-1999; 99US-00380138.
PR 25-AUG-1999; 99US-00380142.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.

PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000US-00709238.
PR 27-NOV-2000; 2000US-00723749.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
PR 22-MAR-2001; 2001US-00816920.
PR 22-MAR-2001; 2001WO-US009552.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
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Db 18 GAACTCCGTGGCGG 5

RESULT 707
ADE35102/c
ID ADE35102 standard; DNA; 18 BP.
XX
AC ADE35102;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003203434-A1.
XX
PD 30-OCT-2003.
XX
PF 18-OCT-2001; 2001US-00145088.
XX
PR 15-MAY-1998; 98US-0085689P.
PR 08-MAR-1999; 99WO-US005028.
PR 28-APR-1999; 99US-0131445P.
PR 25-AUG-1999; 99US-00380138.
PR 18-FEB-2000; 2000WO-US004341.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-875641/81.
XX
PT New genes, and its encoded secreted and transmembrane polypeptides,
PT useful for treating e.g. lung or breast tumors, osteoarthritis,
PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,
PT hypoinsulinemia or wounds.
XX
PS Example 4; SEQ ID NO 14; 462pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
||||||| |||||||
Db 18 GAACTCCGTGGCGG 5

RESULT 708
ADE16216/c
ID ADE16216 standard; DNA; 18 BP.
XX
AC ADE16216;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003203435-A1.
XX
PD 30-OCT-2003.
XX
PF 18-OCT-2001; 2001US-00145092.
XX
PR 30-APR-1998; 98US-0083742P.
PR 08-MAR-1999; 99WO-US005028.
PR 23-JUN-1999; 99US-0141037P.
PR 25-AUG-1999; 99US-00380138.
PR 18-FEB-2000; 2000WO-US004341.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-875642/81.
XX
PT New genes, and its encoded secreted and transmembrane polypeptides,
PT useful for treating e.g. lung or breast tumors, osteoarthritis,
PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,
PT hypoinsulinemia or wounds.
XX
PS Example 4; SEQ ID NO 14; 452pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
||||||.|||||||
Db 18 GAACTCCGTGGCGG 5

RESULT 709
ADD72831/c
ID ADD72831 standard; DNA; 18 BP.
XX
AC ADD72831;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003203436-A1.
XX
PD 30-OCT-2003.
XX
PF 18-OCT-2001; 2001US-00145129.
XX
PR 22-MAY-1998; 98US-0086414P.
PR 22-DEC-1998; 98US-0113296P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 12-APR-1999; 99US-00284291.
PR 25-AUG-1999; 99US-00380138.
PR 18-FEB-2000; 2000WO-US004341.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-875643/81.
XX
PT New PRO genes and encoded secreted and transmembrane polypeptides, useful
PT for treating e.g. lung or breast tumors, osteoarthritis, rheumatoid
PT arthritis, obesity, diabetes, hyperinsulinemia, hypoinsulinemia or
PT wounds.
XX

PS Example 4; SEQ ID NO 14; 453pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
||||| |||||||
Db 18 GAACTCCGTGGCGG 5

RESULT 710
ADD72189/c
ID ADD72189 standard; DNA; 18 BP.
XX
AC ADD72189;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003194781-A1.
XX
PD 16-OCT-2003.
XX
PF 19-OCT-2001; 2001US-00164929.
XX
PR 30-MAR-1998; 98US-0079920P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98WO-US024855.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 15-APR-1999; 99WO-US008313.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380138.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-852598/79.
XX
PT New secreted and transmembrane PRO nucleic acids and polypeptides, useful
PT for stimulating the release of tumor necrosis factor alpha from human
PT blood and stimulating the proliferation of differentiation of chondrocyte
PT cells.
XX
PS Example 4; SEQ ID NO 14; 462pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.

CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
||||||.|||||||
Db 18 GAACTCCGTGGCGG 5

RESULT 711
ADE16840/c
ID ADE16840 standard; DNA; 18 BP.
XX
AC ADE16840;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003203433-A1.
XX
PD 30-OCT-2003.
XX
PF 18-OCT-2001; 2001US-00145016.
XX
PR 06-MAY-1998; 98US-0084414P.
PR 22-DEC-1998; 98US-0113296P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 12-APR-1999; 99US-00284291.
PR 25-AUG-1999; 99US-00380138.
PR 18-FEB-2000; 2000WO-US004341.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-875640/81.
XX
PT New genes, and its encoded secreted and transmembrane polypeptides,
PT useful for treating e.g. lung or breast tumors, osteoarthritis,
PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,
PT hypoinsulinemia or wounds.
XX
PS Example 4; SEQ ID NO 14; 459pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
||||||.|||||||
Db 18 GAACTCCGTGGCGG 5

RESULT 712
ADE48348/c
ID ADE48348 standard; DNA; 18 BP.
XX
AC ADE48348;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 274 PCR primer #4.

XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003104536-A1.
XX
PD 05-JUN-2003.
XX
PF 19-OCT-2001; 2001US-00166709.
XX
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98WO-US024855.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2004-008994/01.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO4993 or
PT PRO337, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Example 4; SEQ ID NO 14; 460pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 2 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
|||||| |||||||
Db 18 GAACTCCGTGGCGG 5

RESULT 713
ADE89449/c
ID ADE89449 standard; DNA; 18 BP.
XX
AC ADE89449;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 274 PCR primer #4.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003130181-A1.
XX
PD 10-JUL-2003.
XX
PF 16-OCT-2001; 2001US-00978375.
XX
PR 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.

PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078910P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 31-MAR-1998; 98US-0080105P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080165P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080328P.
PR 01-APR-1998; 98US-0080333P.
PR 01-APR-1998; 98US-0080334P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 08-APR-1998; 98US-0081071P.
PR 09-APR-1998; 98US-0081195P.
PR 09-APR-1998; 98US-0081203P.
PR 09-APR-1998; 98US-0081229P.
PR 15-APR-1998; 98US-0081817P.
PR 15-APR-1998; 98US-0081819P.
PR 15-APR-1998; 98US-0081838P.
PR 15-APR-1998; 98US-0081952P.
PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082700P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0082796P.
PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083392P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0083496P.
PR 29-APR-1998; 98US-0083499P.
PR 29-APR-1998; 98US-0083500P.
PR 29-APR-1998; 98US-0083545P.
PR 29-APR-1998; 98US-0083554P.
PR 29-APR-1998; 98US-0083558P.
PR 29-APR-1998; 98US-0083559P.
PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 06-MAY-1998; 98US-0084441P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
PR 07-MAY-1998; 98US-0084637P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 13-MAY-1998; 98US-0085323P.
PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
PR 15-MAY-1998; 98US-0085573P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-0085697P.
PR 15-MAY-1998; 98US-0085700P.
PR 15-MAY-1998; 98US-0085704P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086414P.
PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087106P.
PR 28-MAY-1998; 98US-0087208P.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.
PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 21-APR-1999; 99US-0130232P.
PR 26-APR-1999; 99US-0131022P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-0134287P.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.

PR 30-JUL-2001; 2001US-00918585.
XX
PA (ASHK/) ASHKENAZI A J.
PA (BAKE/) BAKER K P.
PA (BOTS/) BOTSTEIN D.
PA (DESN/) DESNOYERS L.
PA (EATO/) EATON D L.
PA (FERR/) FERRARA N.
PA (FILV/) FILVAROFF E.
PA (FONG/) FONG S.
PA (GAOW/) GAO W.
PA (GERB/) GERBER H.
PA (GERR/) GERRITSEN M E.
PA (GODD/) GODDARD A.
PA (GODO/) GODOWSKI P J.
PA (GIRM/) GIRMALDI J C.
PA (GURN/) GURNEY A L.
PA (HILL/) HILLAN K J.
PA (KLJA/) KLJAVIN I J.
PA (KUOS/) KUO S S.
PA (NAPI/) NAPIER M A.
PA (PANJ/) PAN J.
PA (PAON/) PAONI N F.
PA (ROYM/) ROY M A.
PA (SHEL/) SHELTON D L.
PA (STEW/) STEWART T A.
PA (TUMA/) TUMAS D.
PA (WILL/) WILLIAMS P M.
PA (WOOD/) WOOD W I.
XX

Query Match 2.9%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 215 GAACTCGGTGGCGG 228
||||||.|||||||
Db 18 GAACTCCGTGGCGG 5

RESULT 714
AAQ11087/c
ID AAQ11087 standard; DNA; 19 BP.
XX
AC AAQ11087;
XX
DT 25-MAR-2003 (revised)
DT 09-JAN-2003 (revised)
DT 30-MAY-1991 (first entry)
XX
DE Probe/primer A(ii) to recombinant M.tuberculosis antigenic peptides.
XX
KW tuberculosis; vaccine; BCG; antigen; ss.
XX
OS Mycobacterium tuberculosis.
XX
PN EP419355-A.
XX
PD 27-MAR-1991.
XX
PF 19-SEP-1990; 90EP-00402590.
XX
PR 19-SEP-1989; 89EP-00402571.
XX
PA (INNO-) INNOGENETICS NV SA.
XX
PI Content J, Dewit L, Debruyn J, Vanvooren JP;
XX
DR WPI; 1991-088933/13.
XX
PT Polypeptide comprising recombinant polypeptide - with defined peptide
PT sequence(s) used for diagnosis and for preparing vaccine against
PT tuberculosis.
XX
PS Claim 23; Page 66; 134pp; English.
XX
CC This oligonucleotide is one of 13 sequences which hybridise to nucleotide
CC sequences coding for recombinant tuberculosis antigenic polypeptides.
CC When used as probes they could differentiate M.tuberculosis from other
CC bacterial strains. When used as primers, the oligonucleotides amplify
CC specific mycobacterial sequences (e.g. nucleotides 1-1358 of the BCG
CC alpha-antigen). Amplified sequences are then detected using one of the
CC other probes. Priner kits are claimed which comprise primer A(ii) with
CC the complement of one of the other 13 primers. See also AAQ11081-3,
CC AAQ11086, AAQ11088-90, AAQ11101-8, AAR11297-R11304. (Updated on 09-JAN-
CC 2003 to add missing OS field.) (Updated on 25-MAR-2003 to correct PI
CC field.)
XX
SQ Sequence 19 BP; 1 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 387 GACGGCGCCAAGAA 400
||||||||||.|||
Db 16 GACGGCGCCACGAA 3

RESULT 715
AAQ54140/c
ID AAQ54140 standard; DNA; 19 BP.
XX
AC AAQ54140;
XX
DT 25-MAR-2003 (revised)
DT 15-JUN-1994 (first entry)
XX
DE Hybridisation probe BG1A.
XX
KW Simultaneous sequencing; ss.
XX
OS Synthetic.
XX
PN WO9324654-A1.
XX
PD 09-DEC-1993.
XX
PF 01-JUN-1993; 93WO-EP001376.
XX
PR 02-JUN-1992; 92DE-04218152.
XX
PA (BOEF) BOEHRINGER MANNHEIM GMBH.
XX
PI Sagner G, Blum H, Domdey H;
XX
DR WPI; 1993-405842/50.
XX
PT Simultaneously sequencing many nucleic acid fragments - by cloning in
PT vector after attachment of double strands adaptors, and sequencing
PT selected clones, for high cloning efficiency with only one vector.
XX
PS Example 4; Page 26; 47pp; German.
XX
CC The sequence is that of hybridisation probe BG1A which was used as part
CC of a method of simultaneously sequencing nucleic acids. (Updated on 25-
CC MAR-2003 to correct PN field.)
XX
SQ Sequence 19 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 221 GGTGGCGGCCAAAT 234
||||||||||.||

```
Db         19 GGTGGCGGCCACAT 6


RESULT 716
AAT43117
ID   AAT43117 standard; DNA; 19 BP.
XX
AC   AAT43117;
XX
DT   05-SEP-1997  (first entry)
XX
DE   Antisense primer to amplify hormone sensitive lipase gene.
XX
KW   Immortalised cell line; pre-adipocyte; viral oncogene; lipolysis; marker;
KW   thermogenesis; diabetes; obesity; cell culture; differentiation; mature;
KW   medium; insulin; dexamethasone; primer; PCR; polymerase chain reaction;
KW   amplification; hormone sensitive lipase; ss.
XX
OS   Synthetic.
XX
PN   WO9634100-A1.
XX
PD   31-OCT-1996.
XX
PF   25-APR-1996;   96WO-FR000634.
XX
PR   25-APR-1995;   95FR-00004922.
XX
PA   (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI   Strosberg AD,  Zilberfarb V;
XX
DR   WPI; 1996-497632/49.
XX
PT   Immortalised pre-adipocytes contg viral oncogene fragment - useful for
PT   identifying cpds that regulate lipolysis and thermogenesis, as lipolytic
PT   agents and models for studying adipocyte processes.
XX
PS   Example 1; Page 17; 52pp; French.
XX
CC   The invention relates to new immortalised cell lines derived from pre-
CC   adipocytes containing an immortalising fragment of a viral oncogene. The
CC   immortalised adipocytes are used to identify substances able to regulate
CC   lipolysis and/or thermogenesis (potential therapeutic agents for treating
CC   diabetes and obesity). The cell lines have the advantage that they can be
CC   maintained in long term culture (contrast primary cultures of adipocytes)
CC   without loss of characteristic markers or ability to differentiate. The
CC   immortalised pre-adipocytes differentiate into mature adipocytes when
CC   placed in a medium containing insulin and dexamethasone. The primers
CC   AAT43098-19 are used to amplify marker genes to verify differentiation of
CC   the pre-adipocytes into mature adipocytes. Primers AAT43116-7 were used
CC   to amplify a 286 bp region of the gene encoding a hormone sensitive
CC   lipase, a marker for mature "brown" adipocytes
XX
SQ   Sequence 19 BP; 1 A; 9 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        364 TCCTCACTTTCCTG 377
              ||||||||  |||||
Db          3 TCCTCACTGTCCTG 16


RESULT 717
AAT16004
ID   AAT16004 standard; DNA; 19 BP.
XX
AC   AAT16004;
XX
DT   28-JUN-1996  (first entry)
XX
DE   5' allele-specific primer for HLA-Cw6 amplification.
XX
KW   tumour rejection antigen; detection; cancer; tissue type; HLA-B44;
KW   human leukocyte antigen; immunogenic; primer; PCR; ss.
XX
OS   Synthetic.
XX
PN   WO9533855-A1.
XX
PD   14-DEC-1995.
XX
PF   31-MAY-1995;   95WO-US006852.
XX
PR   03-JUN-1994;   94US-00253503.
PR   17-JAN-1995;   95US-00373636.
XX
PA   (LUDW-) LUDWIG INST CANCER RES.
XX
PI   Boon-Falleur T,  Coulie P;
XX
DR   WPI; 1996-049316/05.
XX
PT   Nucleic acid encoding tumour rejection antigen precursor - useful in
PT   assay for determining cancerous condition in patient of e.g. tissue type
PT   HLA-B44.
XX
PS   Example 9; Page 13; 44pp; English.
XX
CC   AAT15996-16007 are allele-specific primers that were used to discriminate
CC   each of six HLA alleles that had been serologically typed in a LB33 cell
CC   line (a melanoma cell line). Amplification refractory mutation system was
CC   used, which relies on a perfect nucleotide match at the 3' end of primers
CC   to ensure specificity of DNA amplifications. It was suggested that A24-
CC   B13-Cw6, and A28-B44-Cw7 consititute two HLA class I haplotypes of
CC   patient LB33, and that reduced expression of these haplotypes probably
CC   accounted for loss of antigen expression by immunoselected tumour cells.
CC   The invention concerns a nucleic acid (AAT08972) which encodes a tumour
CC   rejection antigen, which can be used in determining cancerous conditions
CC   in patients of tissue type HLA-B44
XX
SQ   Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          7 GAGTGAAACTGCGG 20
              |||||| ||||||
Db          3 GAGTGAACCTGCGG 16


RESULT 718
AAT79214
ID   AAT79214 standard; DNA; 19 BP.
XX
AC   AAT79214;
XX
DT   25-MAR-2003  (revised)
DT   25-FEB-1998  (first entry)
XX
DE   HLA-Cw6 allele-specific 5' PCR primer.
XX
KW   Tumour rejection antigen precursor; TRAP; HLA-Cw6; HLA-B44;
KW   human leukocyte antigen B44; cytotoxic T lymphocyte; cancer; melanoma;
KW   therapy; diagnosis; vaccine; primer; PCR; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9731017-A1.
XX
PD   28-AUG-1997.
XX
```

PF 05-FEB-1997; 97WO-US001915.
XX
PR 20-FEB-1996; 96US-00602506.
XX
PA (LUDW-) LUDWIG INST CANCER RES.
XX
PI Herman J, Coulie P, Boonfalleur T, Van Der Bruggen P, Luescher I;
XX
DR WPI; 1997-435086/40.
XX
PT Tumour rejection antigens presented by human leukocyte antigen B44
PT molecules - useful to identify HLA-B44 positive cells for diagnosis and
PT therapy of cellular abnormalities.
XX
PS Example 9; Page 15; 74pp; English.
XX
CC 2 Oligonucleotides (AAT79214 and AAT79215) respectively comprise 5' and
CC 3' primers for the specific PCR amplification of HLA-Cw6 sequences.
CC Melanoma LB33 cell lines have been serologically typed as HLA-A24, A28,
CC B13, B44, Cw6, Cw7. Semi-quantitative conditions for DNA amplification by
CC PCR were established to assess the expression of each of the 6 class I
CC alleles by different LB33-MEL tumour cell clones. Primers (AAT79206-17)
CC were designed to enable discrimination of each allele from the 5 others.
CC The results suggest that A24-B13-Cw6 and A28-B44-Cw7 constitute 2 HLA
CC class I haplotypes of patient LB33, and that reduced expression of these
CC haplotypes accounts for loss of antigen exression by immunoselected
CC tumour cells. Claimed tumour rejection antigens (see AAW23038-43)
CC presented by HLA-B44 molecules can be used in methods for the diagnosis
CC and therapy of cellular abnormalities involving expression of a tumour
CC rejection antigen precursor, such as cancer, especially melanoma.
CC (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 7 GAGTGAAACTGCGG 20
||||||| ||||||
Db 3 GAGTGAACCTGCGG 16

RESULT 719
AAT92948
ID AAT92948 standard; RNA; 19 BP.
XX
AC AAT92948;
XX
DT 24-APR-1998 (first entry)
XX
DE Antisense oligonucleotide which inhibits VEGF expression.
XX
KW Antisense oligonucleotide; cellular vascular endothelial growth factor;
KW VEGF; vascular permeability factor; blood vessel formation; angiogenesis;
KW vascular permeability induction; disease progression;
KW increased angiogenesis; phosphorothioate; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .19
FT /*tag= a
FT /note= "Phosphorothioate linkage between each residue; C5
FT -propynyl pyrimidines"
XX
PN WO9739120-A2.
XX
PD 23-OCT-1997.
XX
PF 17-APR-1997; 97WO-US006412.
XX
PR 17-APR-1996; 96US-0015752P.
XX
PA (ARON-) ARONEX PHARM INC.
XX
PI Chaudhary N, Rao T, Revankar GR, Cossum PA, Rando RF, Peyman A;
PI Uhlmann E;
XX
DR WPI; 1997-526457/48.
XX
PT Anti:sense oligonucleotide(s) inhibiting VEGF expression - used for
PT treating diseases characterised by vascularisation and vascular
PT permeability, e.g. diabetic retinopathy.
XX
PS Claim 40; Page 43; 64pp; English.
XX
CC Novel antisense oligonucleotides AAT92942-62 reduce cellular vascular
CC endothelial growth factor (VEGF) production in cells. Inclusion of a C5-
CC propynyl uridine, or a C5-propynyl cytidine nucleotide residue in the
CC oligonucleotide sequence increases the duplex melting temperature by at
CC least 5 degrees celcius. VEGF, also known as vascular permeability
CC factor, is necessary for the formation of blood vessels (angiogenesis)
CC during growth and developmental processes, and for tissue repair. This
CC growth factor induces vascular permeability, is chemotactic for monocytes
CC and osteoblasts, and is a selective mitogen for endothelial cells.
CC Abnormally high concentrations of VEGF are associated with diseases
CC characterised by a high degree of vascularisation or vascular
CC permeability. Cells treated with the antisense oligonucleotides at
CC concentrations of less that 1 micromolar, produce no more than 90% of the
CC VEGF that is produced by untreated cells. The antisense oligonucleotides
CC can be used for slowing the progression of diseases associated with
CC increased angiogenesis and vascular permeability. They can be used in the
CC treatment of diabetic retinopathy, aggressive cancers, psoriasis,
CC rheumatoid arthritis and other inflammatory conditions
XX
SQ Sequence 19 BP; 5 A; 5 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 85.7%; Pred. No. 4.8e+02;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 39 GAAGATGGCCACCA 52
||||:| ||||||
Db 1 GAAGAUGUCCACCA 14

RESULT 720
AAT62046
ID AAT62046 standard; DNA; 19 BP.
XX
AC AAT62046;
XX
DT 25-MAR-2003 (revised)
DT 29-OCT-1997 (first entry)
XX
DE HLA-Cw6 allele 5' PCR primer.
XX
KW HLA-B24; HLA-B44; tumour rejection antigen precursor; TRAP; cancer;
KW human; melanoma; diagnosis; therapy; polymerase chain reaction; PCR;
KW primer; ss.
XX
OS Synthetic.
XX
PN WO9710837-A1.
XX
PD 27-MAR-1997.
XX
PF 19-SEP-1996; 96WO-US015078.
XX
PR 21-SEP-1995; 95US-00531864.
XX
PA (LUDW-) LUDWIG INST CANCER RES.
XX
PI Herman J, Coulie P, Van Der Bruggen P, Boonfalleur T;

```
XX
DR   WPI; 1997-202614/18.
XX
PT   HLA-B44 molecule binding peptide(s) - useful to identify HLA-B44 positive
PT   cells, and develop products for diagnosis and therapy of, e.g. cancer.
XX
PS   Example 9; Page 13; 55pp; English.
XX
CC   This 5' primer is specific for class I allele HLA-Cw6. Allele- specific
CC   primers (AAT62038-49) enable discrimination of each of the six class I
CC   alleles (HLA-A24, A28, B13, B44, Cw6 and Cw7) of melanoma patient LB33.
CC   DNA from different LB33-MEL tumour cell clones was subjected to PCR
CC   amplification. The results showed that A24-B13-Cw6 and A28-B44-Cw7
CC   constitute two HLA class I haplotypes of patient LB33, and that reduced
CC   expression of these haplotypes probably accounts for loss of antigen
CC   expression by immunoselected tumour cells. HLA-B44 binding peptides
CC   (AAW13251-56) can be used to identify HLA-B44 positive cells, and to
CC   develop products for the diagnosis and therapy of e.g. cancer,
CC   particularly melanoma. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          7 GAGTGAAACTGCGG 20
              ||||||| ||||||
Db          3 GAGTGAACCTGCGG 16


RESULT 721
AAX59110/c
ID   AAX59110 standard; DNA; 19 BP.
XX
AC   AAX59110;
XX
DT   31-AUG-1999  (first entry)
XX
DE   Human nuclear receptor nNR5 PCR primer R5R4.
XX
KW   Nuclear receptor protein; nNR5; human; retina; eye disease; therapy;
KW   diagnosis; PCR; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9929725-A1.
XX
PD   17-JUN-1999.
XX
PF   11-DEC-1998;   98WO-US026422.
XX
PR   12-DEC-1997;   97US-0069379P.
XX
PA   (MERI ) MERCK & CO INC.
XX
PI   Chen F;
XX
DR   WPI; 1999-385576/32.
XX
PT   DNA encoding human nuclear receptor nNR5.
XX
PS   Example 1; Page 32; 57pp; English.
XX
CC   This oligonucleotide comprises PCR primer R5R4, which was used with
CC   primer R5F3 (see AAX59109) to define the intron-exon boundary in a cDNA
CC   clone (see AAX59096) that had been isolated from a human retina cDNA
CC   library and which coded for a novel member of the nuclear receptor
CC   superfamily. An intronless clone (see AAX59095) was subsequently
CC   amplified from the retina cDNA library. This encoded nNR5 (see AAY06301),
CC   a novel member of the human nuclear factor superfamily. nNR5 is expressed
CC   at high levels in the retina and may therefore play a role in eye
CC   function. The invention also provides recombinant vectors and host cells,
CC   methods of screening for modulators of nNR5 activity, and production of
CC   antibodies against nNR5
XX
SQ   Sequence 19 BP; 2 A; 7 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        336 GACCAGGGCCGGCT 349
              | ||||||||||||
Db         18 GCCCAGGGCCGGCT 5


RESULT 722
AAZ87065/c
ID   AAZ87065 standard; DNA; 19 BP.
XX
AC   AAZ87065;
XX
DT   16-MAY-2000  (first entry)
XX
DE   RBP-7 microsequencing primer for marker 5-143-84.
XX
KW   RBP-7; retinoblastoma binding protein-7; abnormal cell proliferation;
KW   diagnosis; therapy; cell differentiation; thyroid hyperplasia; psoriasis;
KW   benign prostate hypertrophy; cancer; sarcoma; neoplasm; leukaemia;
KW   lymphoma; biallelic marker; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200000607-A1.
XX
PD   06-JAN-2000.
XX
PF   30-JUN-1999;   99WO-IB001242.
XX
PR   30-JUN-1998;   98US-0091315P.
PR   10-DEC-1998;   98US-0111909P.
XX
PA   (GEST ) GENSET.
XX
PI   Bougueleret L;
XX
DR   WPI; 2000-117170/10.
XX
PT   Novel nucleic acid and polymorphic markers used for diagnosis of
PT   diseases, especially those involving abnormal cell proliferation and
PT   differentiation.
XX
PS   Claim 15; Page 218; 223pp; English.
XX
CC   This sequence represents a microsequencing primer for a biallelic marker
CC   from the retinoblastoma binding protein-7 (RBP-7) genomic sequence
CC   (AAZ86967) of the invention. The RBP-7 coding sequence and regulatory
CC   sequences are useful for the recombinant production of the protein and
CC   for expressing heterologous nucleic acids. Primers and probes derived
CC   from the RBP-7 nucleotide sequence (such as this sequence) are useful for
CC   DNA amplification and detection methods. RBP-7 biallelic markers (see
CC   AAZ86993-Z87034) are useful for diagnosis of disease related to
CC   alteration in the regulation or in the coding regions of the RBP-7 gene
CC   and for prognosis/diagnosis of an eventual treatment with therapeutic
CC   agents, especially agents acting on pathologies involving abnormal cell
CC   proliferation and/or differentiation, these include thyroid hyperplasia,
CC   psoriasis, benign prostate hypertrophy, cancers, including breast cancer,
CC   sarcomas and other neoplasms, bladder cancer, colon cancer, lung cancer,
CC   prostate cancer, various leukaemias, and lymphomas. RBP-7 antibodies are
CC   useful as diagnostic agents
XX
SQ   Sequence 19 BP; 3 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
```

```
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         55 CAGAGGAGTCTCTG 68
              |||||||||| |||
Db         14 CAGAGGAGTCACTG 1


RESULT 723
AAH02312
ID   AAH02312 standard; DNA; 19 BP.
XX
AC   AAH02312;
XX
DT   12-JUN-2001  (first entry)
XX
DE   Human lipoprotein lipase coding sequence fragment SEQ ID NO: 6.
XX
KW   Database; polymorphism; SNP; human; genetic marker; disease; infection;
KW   drug response; ds.
XX
OS   Homo sapiens.
XX
PN   WO200127857-A2.
XX
PD   19-APR-2001.
XX
PF   13-OCT-2000; 2000WO-US028413.
XX
PR   13-OCT-1999;   99US-0159176P.
PR   10-JUL-2000; 2000US-0217251P.
PR   10-JUL-2000; 2000US-0217658P.
PR   19-SEP-2000; 2000US-00663968.
XX
PA   (SEQU-) SEQUENOM INC.
XX
PI   Braun A,  Koester H,  Van Den Boom D,  Ping Y,  Rodi C,  He L;
PI   Chiu N,  Jurinke C;
XX
DR   WPI; 2001-273865/28.
XX
PT   Producing a database for identifying polymorphic genetic markers,
PT   comprises obtaining data relating to members of a healthy population and
PT   entering the information into a database.
XX
PS   Example 1; Page 182; 304pp; English.
XX
CC   The present invention provides a database of human samples obtained from
CC   healthy individuals which can be used to identify polymorphic genetic
CC   markers. Data obtained for the database can be used to sort the samples
CC   by parameters such as age, sex and ethnicity. This is useful in linking
CC   markers with diseases, susceptibility to infection and drug responses.
CC   The present sequence was used in an assay to demonstrate the uses of the
CC   database of the invention
XX
SQ   Sequence 19 BP; 2 A; 9 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        238 GAGGCTGCTTCCCG 251
              ||||||||| ||||
Db          5 GAGGCTGCTCCCCG 18


RESULT 724
ABL53403
ID   ABL53403 standard; DNA; 19 BP.
XX
AC   ABL53403;
XX
DT   31-MAY-2002  (first entry)
XX
DE   Haemagglutination or haemadsorption related DNA SK-2.
XX
KW   Haemagglutination; haemadsorption; fungal infection; phenoloxidase; ds.
XX
OS   Unidentified.
XX
PN   KR2001005404-A.
XX
PD   15-JAN-2001.
XX
PF   28-JUN-1999;   99KR-00026408.
XX
PR   28-JUN-1999;   99KR-00026408.
XX
PA   (SAMY-) SAMYANG GENEX CORP.
XX
PI   Hong SS,  Lee BR,  Lee HS,  Lee HS,  Park JJ;
XX
DR   WPI; 2001-472806/51.
XX
PT   Protein related to hemagglutination or hemadsorption reaction and gene
PT   thereof.
XX
PS   Disclosure; Page 7; 9pp; Korean.
XX
CC   The invention relates to a protein related to the hemagglutination or
CC   hemadsorption reaction and the gene thereof are provided to screen
CC   effective candidates in the diagnosis of fungal infection. The protein of
CC   the invention performs coagulation of foreign material. A phenoloxidase
CC   distinguishes and recognises self and non-self selectively. The
CC   phenoloxidase and the gene thereof induce coagulation and adsorption of a
CC   foreign material by using blood cell so as to block diffusion. The
CC   protein selectively removes fungi and bacteria invading a body, and is
CC   used in the diagnosis of pathogenic foreign material. A pro-phenoloxidase
CC   is used in detection of melanin forming repressor. The current sequence
CC   represents haemagglutination or haemadsorption related DNA referred to as
CC   SK-2
XX
SQ   Sequence 19 BP; 5 A; 5 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         39 GAAGATGGCCACCA 52
              ||||| ||||||||
Db          4 GAAGAGGGCCACCA 17


RESULT 725
AAH24334/c
ID   AAH24334 standard; DNA; 19 BP.
XX
AC   AAH24334;
XX
DT   06-AUG-2001  (first entry)
XX
DE   F2718 (pIR-BgIII-forward) miz-1 proto-oncogene PCR primer.
XX
KW   F2718; miz-1; forward PCR primer; Leishmania tarentolae; proto-oncogene;
KW   ss; pIR-BgIII-forward; colony-PCR.
XX
OS   Synthetic.
XX
PN   WO200132896-A1.
XX
PD   10-MAY-2001.
XX
PF   02-NOV-2000; 2000WO-EP010794.
XX
PR   05-NOV-1999;   99EP-00122222.
XX
```

PA (JENA-) JENA BIOSCIENCE GMBH.
XX
PI Alexandrov K, Grun M;
XX
DR WPI; 2001-316448/33.
XX
PT A new recombinant protein expression system using non pathogenic
PT Kinetoplastidae type host cells such as Leishmania tarentolae allows
PT large scale production on inexpensive media.
XX
PS Example 1; Page 15; 37pp; English.
XX
CC The present sequence represents PCR forward primer-F2718 (pIR-BgIII-
CC forward), used to identify clones of E. coli TG1 which had been
CC transformed with the pIR plasmid containing the miz-1 sequence insert in
CC the right orientation. The present sequence was used to identify these
CC clones using colony-PCR. This was part of an experiment of the invention
CC to express miz-1 in Leishmania tarentolae. The invention comprises an
CC expression and delivery system for the production of recombinant protein
CC with cultivated non-pathogenic Kinetoplastidae parasites. The invention
CC is used to express heterologous proteins or to deliver heterologous
CC proteins into plant or animal cells, unlike prior art recombinant protein
CC expression in Kinetoplastidae, this invention uses non-pathogenic species
CC which do not carry the associated health risks, does not require
CC expensive, uncommon media, and has a relatively high growth rate
XX
SQ Sequence 19 BP; 2 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 255 TCGGCCACGGTGCA 268
||| |||||||||
Db 15 TCGACCACGGTGCA 2

RESULT 726
ABQ79482
ID ABQ79482 standard; DNA; 19 BP.
XX
AC ABQ79482;
XX
DT 15-NOV-2002 (first entry)
XX
DE Chimeric oligonucleotide Kan4021C fragment #2.
XX
KW Mutation; genetic repair; point mutation; frameshift mutation; plant;
KW plastid; chloroplast; repair; DNA recombination; ss.
XX
OS Synthetic.
XX
PN WO200259380-A2.
XX
PD 01-AUG-2002.
XX
PF 07-JAN-2002; 2002WO-US000338.
XX
PR 05-JAN-2001; 2001US-0260076P.
XX
PA (ROBE-) ROBERTS NOBLE FOUND INC SAMMUEL.
XX
PI May GD, Kmiec EB;
XX
DR WPI; 2002-599808/64.
XX
PT Modifying a target site of a plastid gene-of-interest, useful for plant
PT genetic repair, comprises reacting chimeric RNA/DNA oligonucleotides or
PT modified DNA oligonucleotides in conjunction with a cell-free chloroplast
PT lysate.
XX
PS Example 1; Fig 2; 28pp; English.
XX
CC The invention relates to an in vivo or in vitro cell-free method for
CC genetic repair of mutations in plastid genes. The method involves
CC reacting a plastid which contains a specific point or frameshift mutation
CC of interest, a chimeric RNA/DNA oligonucleotide or a modified single
CC stranded oligonucleotide which is believed to contain the genetic code
CC for correcting the gene mutation, and a chloroplast extract taken from
CC the plant of interest. The method of the invention is useful for plant
CC genetic repair. It may also be used in the mechanistic study of plastid
CC gene repair, and facilitates the direct comparison between plant nuclear
CC and organelle DNA repair pathways. The cell-free assay may be used in
CC elucidating plastid DNA recombination and repair pathways in plant cells
CC as well as the identification and characterisation of proteins involved
CC in the process. The current sequence represents a fragment of the
CC chimeric oligonucleotide Kan4021C. This sequence is used in an example
CC from the invention in which a point mutation in the kanamycin resistance
CC gene contained in plasmid pKsm4021 is converted in order to restore
CC kanamycin resistance activity. The chimeric oligonucleotide fragment
CC given here shows that the base conversion has occurred
XX
SQ Sequence 19 BP; 4 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 155 CGGCTTCGACTGGG 168
||||| ||||||||
Db 4 CGGCTACGACTGGG 17

RESULT 727
ADA25739/c
ID ADA25739 standard; RNA; 19 BP.
XX
AC ADA25739;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human REL-A short interfering nucleic acid SEQ ID NO:87.
XX
KW short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;
KW RNA interference; vasotropic; nootropic; antiparkinsonian;
KW neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide;
KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;
KW modulation; inhibition; restenosis; central nervous system lesion;
KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;
KW dementia; amyotrophic lateral sclerosis; cancer;
KW polycystic kidney disease; inflammatory disease; allergic disease;
KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;
KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;
KW nuclear factor; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070970-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US004951.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX

DR WPI; 2003-689788/65.
XX
PT New short interfering nucleic acid downregulates expression of the NF-
PT kappaB gene useful e.g. for treatment and diagnosis of cancer and
PT inflammation.
XX
PS Example 3; Page 129; 149pp; English.
XX
CC The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)
CC gene by RNA interference. Also described: (1) kits for in vitro or in
CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)
CC vectors that express siNA. The siNAs have vasotropic, nootropic,
CC antiparkinsonian, neuroprotective, cytostatic, antiinflammatory,
CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and
CC nephrotropic activities, and can be used in gene therapy, and for the
CC modulation (inhibition) of expression or activity of NF-kappaB by RNA
CC interference (siNA target mRNA, RNA splice variants, post-
CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA
CC sequences can be used to modulate expression of NF-kappaB genes, in
CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in
CC grafts and transplants for treating restenosis and central nervous system
CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,
CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many
CC cancers, other proliferative diseases (restenosis and polycystic kidney
CC disease), inflammatory and/or allergic diseases, viral infections
CC (including HIV), autoimmune diseases and transplant rejection, and also
CC for drug screening; diagnosis; target identification and validation;
CC genetic engineering; pharmacogenomics; studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents human v-rel reticuloendotheliosis viral oncogene homologue A
CC (REL-A) siNA, which is used in the exemplification of the present
CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene
CC enhancer in B-cells.
XX
SQ Sequence 19 BP; 1 A; 9 C; 8 G; 0 T; 1 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 305 GAGCCCCGGGGACC 318
||||||||||| ||
Db 15 GAGCCCCGGGGCCC 2

RESULT 728
ADA26088
ID ADA26088 standard; RNA; 19 BP.
XX
AC ADA26088;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human REL-A short interfering nucleic acid SEQ ID NO:223.
XX
KW short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;
KW RNA interference; vasotropic; nootropic; antiparkinsonian;
KW neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide;
KW anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; gene therapy;
KW modulation; inhibition; restenosis; central nervous system lesion;
KW Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy;
KW dementia; amyotrophic lateral sclerosis; cancer;
KW polycystic kidney disease; inflammatory disease; allergic disease;
KW viral infection; HIV; autoimmune disease; transplant rejection; ribozyme;
KW human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A;
KW nuclear factor; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070970-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US004951.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L;
XX
DR WPI; 2003-689788/65.
XX
PT New short interfering nucleic acid downregulates expression of the NF-
PT kappaB gene useful e.g. for treatment and diagnosis of cancer and
PT inflammation.
XX
PS Example 3; Page 129; 149pp; English.
XX
CC The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of a nuclear factor kappa B (NF-kappaB)
CC gene by RNA interference. Also described: (1) kits for in vitro or in
CC vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3)
CC vectors that express siNA. The siNAs have vasotropic, nootropic,
CC antiparkinsonian, neuroprotective, cytostatic, antiinflammatory,
CC antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and
CC nephrotropic activities, and can be used in gene therapy, and for the
CC modulation (inhibition) of expression or activity of NF-kappaB by RNA
CC interference (siNA target mRNA, RNA splice variants, post-
CC transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA
CC sequences can be used to modulate expression of NF-kappaB genes, in
CC cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in
CC grafts and transplants for treating restenosis and central nervous system
CC lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases,
CC epilepsy, dementia or amyotrophic lateral sclerosis) or for treating many
CC cancers, other proliferative diseases (restenosis and polycystic kidney
CC disease), inflammatory and/or allergic diseases, viral infections
CC (including HIV), autoimmune diseases and transplant rejection, and also
CC for drug screening; diagnosis; target identification and validation;
CC genetic engineering; pharmacogenomics; studying gene function and gene
CC mapping (e.g. of single-nucleotide polymorphisms). The present sequence
CC represents human v-rel reticuloendotheliosis viral oncogene homologue A
CC (REL-A) siNA, which is used in the exemplification of the present
CC invention. REL-A is a nuclear factor of the kappa light polypeptide gene
CC enhancer in B-cells.
XX
SQ Sequence 19 BP; 1 A; 8 C; 9 G; 0 T; 1 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 305 GAGCCCCGGGGACC 318
||||||||||| ||
Db 5 GAGCCCCGGGGCCC 18

RESULT 729
ADD00605/c
ID ADD00605 standard; RNA; 19 BP.
XX
AC ADD00605;
XX
DT 01-JAN-2004 (first entry)
XX
DE HCV coding region-derived 50% conserved RNA sequence 551.
XX
KW HCV infection; replication; pathogenesis; virucide; vaccine;

KW gene therapy; ds.
XX
OS Hepatitis C virus.
XX
PN WO2003016572-A1.
XX
PD 27-FEB-2003.
XX
PF 16-AUG-2002; 2002WO-US021843.
XX
PR 17-AUG-2001; 2001US-0313076P.
PR 20-DEC-2001; 2001US-0344116P.
PR 01-FEB-2002; 2002US-0353750P.
XX
PA (ELIL) LILLY & CO ELI.
XX
PI Zhao G, Lu J, Glass JI, Martinez A, Yang Y;
XX
DR WPI; 2003-268345/26.
XX
PT New double stranded RNA oligonucleotide, useful for preparing a
PT composition for treating or preventing hepatitis C virus.
XX
PS Disclosure; Page 90; 173pp; English.
XX
CC The invention relates to a novel isolated double stranded RNA
CC oligonucleotide about 19 to about 25 ribonucleotides in length or its
CC equivalent. One strand of the oligonucleotide comprises the same
CC nucleotide sequence as a region of a hepatitis C virus (HCV) target RNA
CC polynucleotide sequence required for hepatitis C virus infection,
CC replication or pathogenesis in vitro or in vivo in a host cell. The
CC oligonucleotide of the invention demonstrates virucide activity and may
CC be useful for preparing a composition or vaccine for treating or
CC preventing hepatitis C virus, as well as during gene therapy procedures.
CC The current sequence is that of the HCV coding region-derived conserved
CC RNA sequence of the invention.
XX
SQ Sequence 19 BP; 3 A; 7 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 GGAGTGAAACTGCG 19
||||||||| ||||
Db 19 GGAGTGAAAATGCG 6

RESULT 730
ADD00606/c
ID ADD00606 standard; RNA; 19 BP.
XX
AC ADD00606;
XX
DT 01-JAN-2004 (first entry)
XX
DE HCV coding region-derived 50% conserved RNA sequence 552.
XX
KW HCV infection; replication; pathogenesis; virucide; vaccine;
KW gene therapy; ds.
XX
OS Hepatitis C virus.
XX
PN WO2003016572-A1.
XX
PD 27-FEB-2003.
XX
PF 16-AUG-2002; 2002WO-US021843.
XX
PR 17-AUG-2001; 2001US-0313076P.
PR 20-DEC-2001; 2001US-0344116P.
PR 01-FEB-2002; 2002US-0353750P.
XX
PA (ELIL) LILLY & CO ELI.
XX
PI Zhao G, Lu J, Glass JI, Martinez A, Yang Y;
XX
DR WPI; 2003-268345/26.
XX
PT New double stranded RNA oligonucleotide, useful for preparing a
PT composition for treating or preventing hepatitis C virus.
XX
PS Disclosure; Page 90; 173pp; English.
XX
CC The invention relates to a novel isolated double stranded RNA
CC oligonucleotide about 19 to about 25 ribonucleotides in length or its
CC equivalent. One strand of the oligonucleotide comprises the same
CC nucleotide sequence as a region of a hepatitis C virus (HCV) target RNA
CC polynucleotide sequence required for hepatitis C virus infection,
CC replication or pathogenesis in vitro or in vivo in a host cell. The
CC oligonucleotide of the invention demonstrates virucide activity and may
CC be useful for preparing a composition or vaccine for treating or
CC preventing hepatitis C virus, as well as during gene therapy procedures.
CC The current sequence is that of the HCV coding region-derived conserved
CC RNA sequence of the invention.
XX
SQ Sequence 19 BP; 4 A; 6 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 2.9%; Score 12.4; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 4.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 GGAGTGAAACTGCG 19
||||||||| ||||
Db 18 GGAGTGAAAATGCG 5

RESULT 731
ADD69764
ID ADD69764 standard; DNA; 19 BP.
XX
AC ADD69764;
XX
DT 15-JAN-2004 (first entry)
XX
DE Human ERR gamma 3-related PCR primer - SEQ ID 13.
XX
KW nuclear receptor; ERR gamma 3; oestrogen receptor-related receptor;
KW oestrogen receptor; ER; thyroid hormone; TR; human; ss; PCR; primer.
XX
OS Homo sapiens.
XX
PN WO2003080831-A1.
XX
PD 02-OCT-2003.
XX
PF 25-MAR-2003; 2003WO-JP003611.
XX
PR 25-MAR-2002; 2002JP-00084560.
XX
PA (FUJI) FUJISAWA PHARM CO LTD.
XX
PI Kojo H, Tajima K, Fukagawa M, Nishimura S, Isogai T;
XX
DR WPI; 2003-779262/73.
XX
PT Polynucleotides encoding nuclear receptors, and the encoded proteins,
PT useful as diagnostic agents, and for identification of agents that affect
PT receptor activity.
XX
PS Example 6; SEQ ID NO 13; 148pp; Japanese.
XX
CC The invention relates to novel nuclear receptor ERR (oestrogen receptor-
CC related receptor) gamma 3 polynucleotides. The polynucleotides of the
CC invention may be useful for diagnosis of disorders caused by abnormal
CC nuclear receptor activity, particularly those related to abnormal

```
CC   oestrogen receptor (ER), ERR or thyroid hormone receptor (TR) activity.
CC   Furthermore, the polynucleotides and proteins may be useful for
CC   evaluating agents that affect the activity of nuclear receptors. The
CC   current sequence is that of the human ERR gamma 3-related PCR primer (SEQ
CC   ID 13) of the invention.
XX
SQ   Sequence 19 BP; 3 A; 7 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         63 TCTCTGCACTACGA 76
              || ||||||||||
Db          6 TCCCTGCACTACGA 19


RESULT 732
ADE13385
ID   ADE13385 standard; DNA; 19 BP.
XX
AC   ADE13385;
XX
DT   29-JAN-2004  (first entry)
XX
DE   HLA class I allele specific primer #1.
XX
KW   ss; primer; PCR; human; Human Leukocyte Antigen; HLA; genotype.
XX
OS   Homo sapiens.
XX
PN   US2003165884-A1.
XX
PD   04-SEP-2003.
XX
PF   25-APR-2002; 2002US-00133779.
XX
PR   20-DEC-1999;   99US-0172768P.
PR   20-DEC-2000; 2000US-00747391.
XX
PA   (STEM-) STEMCYTE INC.
XX
PI   Chow R,  Tonai R;
XX
DR   WPI; 2003-874916/81.
XX
PT   Identifying class I or II Human Leukocyte Antigen genotypes using
PT   hybridization and amplification assays.
XX
PS   Claim 7; SEQ ID NO 1; 66pp; English.
XX
CC   The invention relates to a method of identifying a class I or II Human
CC   Leukocyte Antigen (HLA) genotype of a subject using hybridisation and
CC   amplification assay. The method is used for determining the HLA genotype
CC   of a subject. The present sequence represents a HLA class I allele
CC   specific primer.
XX
SQ   Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          7 GAGTGAAACTGCGG 20
              ||||||| ||||||
Db          3 GAGTGAACCTGCGG 16


RESULT 733
ADE13501
ID   ADE13501 standard; DNA; 19 BP.
XX
AC   ADE13501;
XX
DT   29-JAN-2004  (first entry)
XX
DE   HLA class I allele specific primer #117.
XX
KW   ss; primer; PCR; human; Human Leukocyte Antigen; HLA; genotype.
XX
OS   Homo sapiens.
XX
PN   US2003165884-A1.
XX
PD   04-SEP-2003.
XX
PF   25-APR-2002; 2002US-00133779.
XX
PR   20-DEC-1999;   99US-0172768P.
PR   20-DEC-2000; 2000US-00747391.
XX
PA   (STEM-) STEMCYTE INC.
XX
PI   Chow R,  Tonai R;
XX
DR   WPI; 2003-874916/81.
XX
PT   Identifying class I or II Human Leukocyte Antigen genotypes using
PT   hybridization and amplification assays.
XX
PS   Claim 7; SEQ ID NO 119; 66pp; English.
XX
CC   The invention relates to a method of identifying a class I or II Human
CC   Leukocyte Antigen (HLA) genotype of a subject using hybridisation and
CC   amplification assay. The method is used for determining the HLA genotype
CC   of a subject. The present sequence represents a HLA class I allele
CC   specific primer.
XX
SQ   Sequence 19 BP; 6 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.4;  DB 1;  Length 19;
  Best Local Similarity   92.9%;  Pred. No. 4.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          7 GAGTGAAACTGCGG 20
              ||||||| ||||||
Db          3 GAGTGAACCTGCGG 16


RESULT 734
AAQ22903
ID   AAQ22903 standard; DNA; 17 BP.
XX
AC   AAQ22903;
XX
DT   25-MAR-2003  (revised)
DT   07-JUL-1992  (first entry)
XX
DE   HCV-Hc59 primer #795 (sense strand).
XX
KW   Hepatitis C virus; non-A non-B virus; HCV-Hc59; primers; probes; vaccine;
KW   ss.
XX
OS   Synthetic.
XX
PN   WO9203458-A.
XX
PD   05-MAR-1992.
XX
PF   23-AUG-1991;   91WO-US006037.
XX
PR   25-AUG-1990;   90US-00573643.
PR   21-NOV-1990;   90US-00616369.
PR   21-AUG-1991;   91US-00748564.
XX
PA   (NYBL-) NEW YORK BLOO DCENT.
```

PA (PHAR-) PHARMA.
XX
PI Zebedee S, Inchauspe G, Nasofe MS, Prince AM;
XX
DR WPI; 1992-096821/12.
XX
PT Deoxyribonucleic acid sequence encoding non-A, non-B hepatitis virus -
PT obtd. Hutch C59 subgroup encoding polypeptide(s), useful as vaccines, and
PT immuno reactive ABS for diagnosis of virus.
XX
PS Disclosure; Page 107; 225pp; English.
XX
CC One Hutch strain (HCV-H) of NANBV, designated the Hutch c59 isolate (HCV-
CC Hc59) was propagated through passage in animals and the entire viral
CC genome was cloned and sequenced. Five microg of purified liver or plasma
CC derived from HCV RNA was used per cDNA priming reaction. Specific
CC nucleotide primers derived from published HCV sequences and spanning the
CC entire reported genomic sequences were used to prime the reaction.
CC Selected target sequences were amplified using a PCR-based approach using
CC a variety of nucleotide primers. The nucleotide sequences of the primers
CC are given in AAQ22872-936 and AAQ24472. Amplified sequences were
CC subsequently isolated, rendered blunt-ended and inserted into a pUC or
CC pBluescript cloning vectors. (Updated on 25-MAR-2003 to correct PR
CC field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 17 BP; 1 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        250 CGGGCTCGGCCACGGTG 266
              ||||||| | ||| |||
Db          1 CGGGCTCCGTCACTGTG 17
```

RESULT 735
AAQ92383/c
ID AAQ92383 standard; DNA; 17 BP.
XX
AC AAQ92383;
XX
DT 15-JAN-1996 (first entry)
XX
DE Human mismatch repair pathway gene MSH2, primer 17209.
XX
KW Mismatch repair; MSH2; primer; identification; defect; alteration;
KW cancer; tumour; vaccine; ss.
XX
OS Homo sapiens.
XX
PN WO9514085-A2.
XX
PD 26-MAY-1995.
XX
PF 17-NOV-1994; 94WO-US013385.
XX
PR 17-NOV-1993; 93US-00154792.
PR 07-DEC-1993; 93US-00163449.
PR 13-JUN-1994; 94US-00259310.
XX
PA (DAND) DANA FARBER CANCER INST.
PA (UYVE-) UNIV VERMONT & STATE AGRIC COLLEGE.
XX
PI Kolodner RD, Fishel R, Reenan RA;
XX
DR WPI; 1995-200377/26.
XX
PT Determining alteration in human mismatch repair pathways - used in the
PT diagnosis, prognosis and therapy of cancers and in screening assays.
XX
PS Claim 15; Page 186; 256pp; English.
XX
CC AAQ92382-Q92400 and AAQ93890-Q93900 are oligonucleotide primers used to
CC detect alterations in the human mismatch repair pathway gene MSH2.
CC Defects or alterations in such a gene result in the accumulation of
CC unstable repeated DNA sequences, a feature of a number of different
CC cancers. The identification of a defect in the mismatch repair pathway
CC can be diagnostic of a predisposition to cancer and prognostic for a
CC particular mammalian cancer e.g colorectal, ovarian, endometrial
CC (uterine), renal, bladder, skin, rectal and bowel. The nucleotide
CC sequences and polypeptides of the hMSH2 gene may also be used for therapy
CC and in vaccines
XX
SQ Sequence 17 BP; 2 A; 10 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        319 GCGTGCTGGCGGCGGAC 335
              ||||||||| |  ||||
Db         17 GCGTGCTGGGGAGGGAC 1
```

RESULT 736
AAX74482
ID AAX74482 standard; RNA; 17 BP.
XX
AC AAX74482;
XX
DT 28-JUL-1999 (first entry)
XX
DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #10.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Mus sp.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
PS Claim 4; Page 155; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX

```
SQ   Sequence 17 BP; 0 A; 5 C; 5 G; 0 T; 7 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 4.2e+02;
  Matches   10;  Conservative    4;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        234 TCGGGAGGCTGCTTCCC 250
              :|||| | |:||::| |
Db          1 UCGGGUGUCUGCUUCUC 17


RESULT 737
AAT76486/c
ID   AAT76486 standard; DNA; 17 BP.
XX
AC   AAT76486;
XX
DT   16-SEP-1997  (first entry)
XX
DE   Endothelial nitric oxide antisense oligonucleotide.
XX
KW   Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW   chronic obstructive pulmonary disease; bronchitis; ss.
XX
OS   Synthetic.
XX
PN   WO9640162-A1.
XX
PD   19-DEC-1996.
XX
PF   06-JUN-1996;   96WO-US009306.
XX
PR   07-JUN-1995;   95US-00474497.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW,  Metzger WJ;
XX
DR   WPI; 1997-051871/05.
XX
PT   Treatment of airway diseases such as asthma - by topically applying
PT   adenosine-free antisense oligo:nucleotide to airway epithelium of
PT   subject.
XX
PS   Example 5; Page 42; 71pp; English.
XX
CC   A method for treating airway disease in a subject has been produced,
CC   which involves the topical administration of an essentially adenosine
CC   free antisense oligonucleotide (ON) to the airway epithelium of the
CC   subject. The present sequence is an antisense oligonucleotide specific
CC   for endothelial nitric oxide. The method can be used to treat airway
CC   diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC   disease, bronchitis and other airway diseases characterised by an
CC   inflammatory response. By eliminating adenosine from the antisense ON,
CC   its liberation upon antisense degradation is prevented, thereby
CC   preventing adenosine-induced bronchoconstriction in patients with hyper-
CC   reactive airways
XX
SQ   Sequence 17 BP; 0 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        268 ACCTGGAGCAGGGCGGC 284
              ||| | ||||| ||||
Db         17 ACCGGCAGCAGGACGGC 1


RESULT 738
AAV97774/c
ID   AAV97774 standard; RNA; 17 BP.
XX
AC   AAV97774;
XX
DT   17-MAR-1999  (first entry)
XX
DE   Human EGF-R target sequence nucleotide position 4357.
XX
KW   Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW   hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW   cancer; genetic drift; detection; mutation; ss.
XX
OS   Homo sapiens.
XX
PN   WO9833893-A2.
XX
PD   06-AUG-1998.
XX
PF   14-JAN-1998;   98WO-US000730.
XX
PR   31-JAN-1997;   97US-0036476P.
PR   04-DEC-1997;   97US-00985162.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (UYAS-) UNIV ASTON.
XX
PI   Akhtar S,  Fell P,  Mcswiggen JA;
XX
DR   WPI; 1998-437449/37.
XX
PT   Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT   growth factor receptor, useful for inhibiting cell proliferation and for
PT   treating cancers.
XX
PS   Claim 5; Page 79; 109pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules (NAMs)
CC   which specifically cleave RNA derived from an epidermal growth factor
CC   receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC   represent specifically claimed target sequence from human EGF-R. AAV98044
CC   to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC   hairpin ribozymes respectively for human EGF-R. The NAMs are useful for
CC   cleaving EGF-R RNA in the treatment of a condition associated with EGFR
CC   expression levels e.g. to inhibit cell proliferation in the prevention or
CC   treatment of cancers. The NAMs can also be used as diagnostic tools to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of EGF-R RNA in a cell
XX
SQ   Sequence 17 BP; 3 A; 7 C; 4 G; 0 T; 3 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        390 GGCGCCAAGAAGGTCTT 406
              || |||| ||||| |||
Db         17 GGGGCCATGAAGGCCTT 1


RESULT 739
AAV97773/c
ID   AAV97773 standard; RNA; 17 BP.
XX
AC   AAV97773;
XX
DT   17-MAR-1999  (first entry)
XX
DE   Human EGF-R target sequence nucleotide position 4356.
XX
KW   Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW   hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW   cancer; genetic drift; detection; mutation; ss.
XX
OS   Homo sapiens.
XX
```

PN WO9833893-A2.
XX
PD 06-AUG-1998.
XX
PF 14-JAN-1998; 98WO-US000730.
XX
PR 31-JAN-1997; 97US-0036476P.
PR 04-DEC-1997; 97US-00985162.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (UYAS-) UNIV ASTON.
XX
PI Akhtar S, Fell P, Mcswiggen JA;
XX
DR WPI; 1998-437449/37.
XX
PT Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT growth factor receptor, useful for inhibiting cell proliferation and for
PT treating cancers.
XX
PS Claim 5; Page 79; 109pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules (NAMs)
CC which specifically cleave RNA derived from an epidermal growth factor
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC represent specifically claimed target sequence from human EGF-R. AAV98044
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC hairpin ribozymes respectively for human EGF-R. The NAMs are useful for
CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR
CC expression levels e.g. to inhibit cell proliferation in the prevention or
CC treatment of cancers. The NAMs can also be used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of EGF-R RNA in a cell
XX
SQ Sequence 17 BP; 3 A; 6 C; 5 G; 0 T; 3 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 391 GCGCCAAGAAGGTCTTC 407
|| |||| ||||| ||||
Db 17 GGGCCATGAAGGCCTTC 1

RESULT 740
AAV48482/c
ID AAV48482 standard; DNA; 17 BP.
XX
AC AAV48482;
XX
DT 15-OCT-1998 (first entry)
XX
DE TGF-beta-1 antisense oligonucleotide TGF-beta1-31.
XX
KW Transforming growth factor beta-1; TGF beta-1; antisense oligonucleotide;
KW modulate; gene expression; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN EP856579-A1.
XX
PD 05-AUG-1998.
XX
PF 31-JAN-1997; 97EP-00101531.
XX
PR 31-JAN-1997; 97EP-00101531.
XX
PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI Schlingensiepen K, Brysch W;
XX
DR WPI; 1998-400910/35.
XX
PT Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT consecutive guanosine or inosine - and have specific ratio of residues
PT able to form two or three hydrogen bonds, have greater activity and
PT reduced toxicity, used therapeutically or to modulate growth of cells in
PT culture.
XX
PS Claim 10; Fig 3b; 286pp; English.
XX
CC AAV48412-84 represent antisense oligonucleotides directed against
CC transforming growth factor beta-1 (TGF beta-1). The oligonucleotides
CC exemplify the invention. The specification describes oligonucleotides
CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that
CC can each form three hydrogen bonds to cytosine; do not contain four
CC consecutive nucleotides able to form three H-bonds each to four
CC consecutive cytosines; do not contain two sequences of three consecutive
CC nucleotides each able to form three H-bonds to three consecutive
CC cytosines, and the ratio between residues able to form two H-bonds each
CC (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
CC oligonucleotides are used to modulate expression of genes, particularly
CC the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control
CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or
CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC oligonucleotides can also be used to analyse function of proteins (by
CC altering their expression or activity) and therapeutically, e.g. in cases
CC of cancer or (targeting TGF) for stimulating the immune system
XX
SQ Sequence 17 BP; 6 A; 3 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 350 GCTCTACAGCGACTTCC 366
||| |||| |||||||
Db 17 GCTGTACATTGACTTCC 1

RESULT 741
AAX06941
ID AAX06941 standard; DNA; 17 BP.
XX
AC AAX06941;
XX
DT 10-MAY-1999 (first entry)
XX
DE Canine factor VIII gene fragment PCR primer CS-nt-UTR-U.
XX
KW Factor VIII; canine; dog; diagnosis; animal model; haemophilia A;
KW gene therapy; PCR; primer; ss.
XX
OS Synthetic.
OS Canis familiaris.
XX
PN CA2225189-A.
XX
PD 06-SEP-1998.
XX
PF 06-MAR-1998; 98CA-02225189.
XX
PR 06-MAR-1997; 97US-0039953P.
PR 05-MAR-1998; 98US-00035141.
XX
PA (TOOH) UNIV QUEENS KINGSTON.
XX
PI Lillicrap D, Cameron C, Notley C, Horrocks L, Hough C;
XX
DR WPI; 1999-071205/07.
XX
PT New canine factor VIII polynucleotide and polypeptide - useful for
PT detection and treatment of haemophilia A using gene therapy.
XX

```
PS   Example 2; Page 57; 153pp; English.
XX
CC   This is the nucleotide sequence of canine factor VIII gene fragment 6A-3
CC   first round PCR primer CS-nt-UTR-U, where CS indicates canine-specific,
CC   and U refers to the amplification region being upstream of the primer.
CC   The canine factor VIII gene nucleotide sequence (see AAV99801) was
CC   obtained by concatamerisation of RT-PCR-amplified factor VIII fragments
CC   obtained from canine liver total RNA (see AAX06886-918), and the sequence
CC   was confirmed by RT-PCR (see AAX06919-41). The invention also provides
CC   canine factor VIII polypeptides (see AAW80989) and methods for the
CC   detection and treatment of canine disorders characterised by factor VIII
CC   deficiency, especially haemophilia A
XX
SQ   Sequence 17 BP; 2 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        214 AGAACTCGGTGGCGGCC 230
              ||| |||| || |||||
Db          1 AGACCTCGCTGTCGGCC 17


RESULT 742
AAV91040
ID   AAV91040 standard; RNA; 17 BP.
XX
AC   AAV91040;
XX
DT   18-FEB-1999  (first entry)
XX
DE   Human C-raf target site nucleotide position 747.
XX
KW   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW   target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KW   screening; identification; synthesis; deprotection; purification; cancer;
KW   inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KW   restenosis; rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9850530-A2.
XX
PD   12-NOV-1998.
XX
PF   05-MAY-1998;   98WO-US009249.
XX
PR   09-MAY-1997;   97US-0046059P.
PR   09-JUN-1997;   97US-0049002P.
PR   03-JUL-1997;   97US-0051718P.
PR   22-AUG-1997;   97US-0056808P.
PR   02-OCT-1997;   97US-0061321P.
PR   02-OCT-1997;   97US-0061324P.
PR   05-NOV-1997;   97US-0064866P.
PR   19-DEC-1997;   97US-0068212P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Jarvis T,  Matulic-Adamic J,  Reynolds M,  Kisich K,  Bellon L;
PI   Parry T,  Beigelman L,  Mcswiggen JA,  Karpeisky A,  Burgin A;
PI   Thompson J,  Workman CT,  Beaudry A,  Sweedler D;
XX
DR   WPI; 1999-009494/01.
XX
PT   Identifying new catalytic nucleic acid that modulates selected processes
PT   - especially ribozymes that cleave Raf RNA for treating cancer,
PT   restenosis, and also new ribozymes and modified nucleoside triphosphates
PT   used as antiviral agents and synthons.
XX
PS   Claim 177; Page 148; 259pp; English.
XX
CC   A method has been developed for the identification of a nucleic acid
CC   capable of modulating a process in a biological system. The method
CC   comprises: (a) introducing into the system a random library of nucleic
CC   acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC   a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC   in systems where modulation has occurred and/or determining the sequence
CC   of at least part of the SBDs in such systems. Nucleic acid molecules with
CC   endonuclease activity and catalytic activity, from the present invention,
CC   are used to modulate gene expression in plant and mammalian cells and to
CC   cleave target nucleic acid, particularly for treating systemic diseases
CC   caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC   ascites and infection. They may also be used to detect genetic drift and
CC   mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC   with RNA-cleaving activity that modulate expression of the Raf gene, are
CC   used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC   generally any condition associated with the level of c-raf. Introduction
CC   of sugar/phosphate modifications increases stability against nuclease and
CC   activity. AAV90922 to AAV93877 represent NACs that can be used in the
CC   method, specifically for modulating the expression of a Raf gene
XX
SQ   Sequence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   70.6%;  Pred. No. 4.2e+02;
  Matches   12;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         56 AGAGGAGTCTCTGCACT 72
              || ||||:| | ||||:
Db          1 AGUGGAGUCCCAGCACU 17


RESULT 743
AAV92615/c
ID   AAV92615 standard; RNA; 17 BP.
XX
AC   AAV92615;
XX
DT   18-FEB-1999  (first entry)
XX
DE   Human A-Raf substrate position 2094.
XX
KW   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW   target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KW   screening; identification; synthesis; deprotection; purification; cancer;
KW   inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KW   restenosis; rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9850530-A2.
XX
PD   12-NOV-1998.
XX
PF   05-MAY-1998;   98WO-US009249.
XX
PR   09-MAY-1997;   97US-0046059P.
PR   09-JUN-1997;   97US-0049002P.
PR   03-JUL-1997;   97US-0051718P.
PR   22-AUG-1997;   97US-0056808P.
PR   02-OCT-1997;   97US-0061321P.
PR   02-OCT-1997;   97US-0061324P.
PR   05-NOV-1997;   97US-0064866P.
PR   19-DEC-1997;   97US-0068212P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Jarvis T,  Matulic-Adamic J,  Reynolds M,  Kisich K,  Bellon L;
PI   Parry T,  Beigelman L,  Mcswiggen JA,  Karpeisky A,  Burgin A;
PI   Thompson J,  Workman CT,  Beaudry A,  Sweedler D;
XX
DR   WPI; 1999-009494/01.
XX
PT   Identifying new catalytic nucleic acid that modulates selected processes
PT   - especially ribozymes that cleave Raf RNA for treating cancer,
```

PT restenosis, and also new ribozymes and modified nucleoside triphosphates
PT used as antiviral agents and synthons.
XX
PS Claim 177; Page 161; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules with
CC endonuclease activity and catalytic activity, from the present invention,
CC are used to modulate gene expression in plant and mammalian cells and to
CC cleave target nucleic acid, particularly for treating systemic diseases
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC ascites and infection. They may also be used to detect genetic drift and
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC with RNA-cleaving activity that modulate expression of the Raf gene, are
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC generally any condition associated with the level of c-raf. Introduction
CC of sugar/phosphate modifications increases stability against nuclease and
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
CC method, specifically for modulating the expression of a Raf gene
XX
SQ Sequence 17 BP; 1 A; 6 C; 3 G; 0 T; 7 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 28 AGGGCTGGGACGAAGAT 44
|||||.|.||||||.||
Db 17 AGGGCAGAGACGAACAT 1

RESULT 744
AAX54277/c
ID AAX54277 standard; DNA; 17 BP.
XX
AC AAX54277;
XX
DT 05-JUL-1999 (first entry)
XX
DE Endothelial nitric oxide synthase antisense oligonucleotide.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 1999-229400/19.
XX
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 61; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC -end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
SQ Sequence 17 BP; 0 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 268 ACCTGGAGCAGGGCGGC 284
|||.|.||||||.||||
Db 17 ACCGGCAGCAGGACGGC 1

RESULT 745
AAX29695/c
ID AAX29695 standard; DNA; 17 BP.
XX
AC AAX29695;
XX
DT 04-JUN-1999 (first entry)
XX
DE Human bone morphogenic protein (BMP)-2 forward primer.
XX
KW BMP; BMP-2; bone morphogenetic protein; tissue regeneration; skin; bone;
KW cartilage; tendon; ligament; muscle; connective tissue; nerve; cardiac;
KW liver; lung; kidney; pancreas; brain; embryonic development;
KW growth factor; osteoporosis; osteoarthritis; fracture; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO9911664-A1.
XX
PD 11-MAR-1999.
XX
PF 04-SEP-1998; 98WO-US018603.
XX
PR 05-SEP-1997; 97US-0057989P.
PR 04-SEP-1998; 98US-00148234.
XX
PA (GEMY) GENETICS INST INC.
PA (YISS) YISSUM RES & DEV CO.
XX
PI Moutsatsos I, Gazit D, Zilberman Y, Turgeman G;
XX
DR WPI; 1999-214697/18.
XX
PT Production of cells for implantation at the site of bone infirmity in a
PT human, using DNA encoding a bone morphogenetic protein - useful for

```
PT   treating osteoporosis, osteoarthritis and non-union fractures.
XX
PS   Example 14; Page 43; 71pp; English.
XX
CC   The invention relates to the production of oils for implantation at the
CC   site of a bone infirmity in a human, that comprises transforming and
CC   culturing a host containing DNA encoding a bone morphogenetic protein
CC   (BMP). The method is useful for regenerating various tissues, including
CC   bone, cartilage, tendon, ligament, muscle, skin (and other connective
CC   tissues), nerve, cardiac, liver, lung, kidney, pancreas, and brain. The
CC   method is also useful for inducing and/or regeneration of tissue,
CC   including the induction of epidermal, endodermal and mesodermal tissue
CC   during embryonic development. The growth factors produced by the method
CC   are useful for treating osteoporosis and osteoarthritis, non-union
CC   fractures. The method provides cells, which are potentially responsive to
CC   BMPs that can be used for growth factor delivery to signalling receptors
CC   of transplanted cells (autocrine effect) and host progenitor stem cells
CC   (paracrine effect) for the engraftment, differentiation, and stimulation
CC   of new bone growth. Therefore, the method provides an effective therapy
CC   for non-union fractures. Sequences AAX29695-696 represent primers for BMP
CC   -2
XX
SQ   Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         23 GACCGAGGGCTGGGACG 39
              | | ||||||||||| |
Db         17 GTCAGAGGGCTGGGATG 1


RESULT 746
AAA33721/c
ID   AAA33721 standard; DNA; 17 BP.
XX
AC   AAA33721;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Low adenosine antisense oligonucleotide SEQ ID NO:1410.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US017712.
XX
PR   03-AUG-1998;   98US-0095212P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstruction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers.
XX
PS   Claim 18; Page 441; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an antisense
CC   oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC   nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC   impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC   sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC   from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC   AAA33992) are specifically claimed ONs from the present invention. N.B.
CC   Sequences given in the disclosure of the present invention do not match
CC   up with their corresponding SEQ ID NO: sequences given in the sequence
CC   listing
XX
SQ   Sequence 17 BP; 0 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        268 ACCTGGAGCAGGGCGGC 284
              ||| | |||||| ||||
Db         17 ACCGGCAGCAGGACGGC 1


RESULT 747
AAA91985
ID   AAA91985 standard; DNA; 17 BP.
XX
AC   AAA91985;
XX
DT   10-JAN-2001  (first entry)
XX
DE   Nested PCR primer 1184F for S. neurona small ribosomal subunit gene.
XX
KW   Small ribosomal subunit; SRSU; Equine protozoal myeloencephalitis; EPM;
KW   diagnosis; nested PCR primer; ss.
XX
OS   Sarcocystis neurona.
XX
PN   US6110665-A.
XX
PD   29-AUG-2000.
XX
PF   14-FEB-1995;   95US-00388029.
XX
PR   14-FEB-1995;   95US-00388029.
XX
PA   (KENT ) UNIV KENTUCKY RES FOUND.
XX
PI   Fenger CK,  Gajadhar AA,  Dubey JP,  Granstrom DE;
XX
DR   WPI; 2000-586347/55.
XX
PT   Sarcocystis neurona diagnostic primer, useful for in vitro diagnostic
PT   testing for Equine protozoal myeloencephalitis, i.e. for diagnosing the
PT   presence of S. neurona in equine blood or cerebrospinal fluid.
XX
PS   Example 3; Col 7; 41pp; English.
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XX
CC   The present invention relates to a diagnostic primer from positions 1470-
CC   1487 of the small ribosomal subunit of Sarcocystis neurona. This primer
CC   is unique to the S. neurona species. The primer is useful for diagnostic
CC   tests for Equine protozoal myeloencephalitis (EPM) where the presence of
CC   S. neurona is indicative of EPM. The present sequence is a nested PCR
CC   primer used in the diagnostic assay to identify S. neurona
XX
SQ   Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          3 CCAGGAGTGAAACTGCG 19
              ||||| ||| | |||||
Db          1 CCAGGCGTGGAGCTGCG 17


RESULT 748
AAZ56635
ID   AAZ56635 standard; DNA; 17 BP.
XX
AC   AAZ56635;
XX
DT   21-MAR-2000  (first entry)
XX
DE   Canine Factor VIII isolation and cloning PCR primer SEQ ID NO:61.
XX
KW   Canine; factor VIII; haemostatic; diagnosis; haemophilia A; dog;
KW   PCR primer; ss.
XX
OS   Canis sp.
XX
PN   CA2264431-A1.
XX
PD   05-SEP-1999.
XX
PF   05-MAR-1999;   99CA-02264431.
XX
PR   05-MAR-1998;   98US-00035141.
PR   06-MAR-1998;   98CA-02225189.
XX
PA   (TOOH ) UNIV QUEENS KINGSTON.
XX
PI   Horrocks LSH,  Hough C,  Notley C,  Lillicrap D,  Cameron C;
XX
DR   WPI; 2000-073270/07.
XX
PT   Isolated nucleic acid encoding a canine factor VIII polypeptide for
PT   treating a disorder characterized by canine factor VIII deficiency, such
PT   as hemophilia A.
XX
PS   Example 2; Page 58; 152pp; English.
XX
CC   The present invention describes canine factor VIII. The isolated factor
CC   VIII nucleic acid molecule and protein can be used for treating a
CC   disorder characterised by canine factor VIII deficiency in a canine,
CC   especially haemophilia A. AAZ56579 to AAZ56635 represent primers used in
CC   the isolation and cloning of canine factor VIII
XX
SQ   Sequence 17 BP; 2 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        214 AGAACTCGGTGGCGGCC 230
              ||| |||| || |||||
Db          1 AGACCTCGCTGTCGGCC 17


RESULT 749
AAF19843/c
ID   AAF19843 standard; DNA; 17 BP.
XX
AC   AAF19843;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human endothelial nitric oxide synthase polynucleotide fragment #1410.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008020.
XX
PR   06-APR-1999;   99US-0127958P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not trigger
PT   adenosine receptors during metabolism, useful e.g. for treating cancers
PT   and respiratory obstructions.
XX
PS   Claim 14; Page 251; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC   surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention
XX
```

```
SQ   Sequence 17 BP; 0 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        268 ACCTGGAGCAGGGCGGC 284
              ||| | |||||| ||||
Db         17 ACCGGCAGCAGGACGGC 1


RESULT 750
AAF05281/c
ID   AAF05281 standard; DNA; 17 BP.
XX
AC   AAF05281;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #2500.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 18; Page 113; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 2 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         67 TGCACTACGAGGGCCGC 83
              ||| |  ||||||||||
Db         17 TGCTCGCCGAGGGCCGC 1


RESULT 751
AAF02584
ID   AAF02584 standard; DNA; 17 BP.
XX
AC   AAF02584;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #879.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 37; Page 76; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 0 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        240 GGCTGCTTCCCGGGCTC 256
              | | ||||| |||||||
Db          1 GCCGGCTTCGCGGGCTC 17


RESULT 752
AAF07245
ID   AAF07245 standard; DNA; 17 BP.
XX
AC   AAF07245;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #3502.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
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```
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 54; Page 136; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 2 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        167 GGTGTACTACGAGTCCA 183
              ||||| |||| |||||
Db          1 GGTGTTCTACCCGTCCA 17


RESULT 753
AAF05334
ID   AAF05334 standard; DNA; 17 BP.
XX
AC   AAF05334;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #2553.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 18; Page 114; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 1 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        348 CTGCTCTACAGCGACTT 364
              ||||||| ||||| | |
Db          1 CTGCTCTTCAGCGCCGT 17


RESULT 754
ABK01641/c
ID   ABK01641 standard; RNA; 17 BP.
XX
AC   ABK01641;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human NOGO G-Cleaver #97.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US004273.
XX
PR   11-FEB-2000; 2000US-0181797P.
PR   28-FEB-2000; 2000US-0185516P.
PR   06-MAR-2000; 2000US-0187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  Mcswiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT   central nervous system injury.
XX
PS   Claim 88; Page 93; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO). The
CC   nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
```

CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a G-cleaver molecule of the invention
XX
SQ Sequence 17 BP; 5 A; 2 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy        360 GACTTCCTCACTTTCCT 376
              ||||||||||  |  |||
Db         17 GACTTCCTCAGTCACCT 1
```

RESULT 755
ABK02370
ID ABK02370 standard; RNA; 17 BP.
XX
AC ABK02370;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Amberzyme #42.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 131; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an amberzyme molecule of the invention
XX
SQ Sequence 17 BP; 7 A; 2 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy         27 GAGGGCTGGGACGAAGA 43
              |||| |  |||||||||
Db          1 GAGGACGAGGACGAAGA 17
```

RESULT 756
ABA81116
ID ABA81116 standard; DNA; 17 BP.
XX
AC ABA81116;
XX
DT 24-JAN-2002 (first entry)
XX
DE UGT1 mutation correcting oligonucleotide SEQ ID NO: 3962.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;

KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 258; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 0 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 338 CCAGGGCCGGCTGCTCT 354
|| ||||| |||||| |
Db 1 CCTGGGCCTGCTGCTGT 17

RESULT 757
ABA77217/c
ID ABA77217 standard; DNA; 17 BP.
XX
AC ABA77217;
XX
DT 24-JAN-2002 (first entry)
XX
DE Adenosine deaminase deficiency correcting oligo SEQ ID NO: 63.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 44; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 89 GGACATCACCACGTCTG 105
|| || |||| ||||||
Db 17 GGCCACCACCTCGTCTG 1

RESULT 758
ABA80849
ID ABA80849 standard; DNA; 17 BP.
XX
AC ABA80849;
XX
DT 24-JAN-2002 (first entry)
XX
DE LDLR mutation correcting oligonucleotide SEQ ID NO: 3695.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;

KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 245; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 4 A; 4 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 74 CGAGGGCCGCGCAGTGG 90
||| ||||| |||| ||
Db 1 CGAAGGCCGAGCAGGGG 17

RESULT 759
ABA81117/c
ID ABA81117 standard; DNA; 17 BP.
XX
AC ABA81117;
XX
DT 24-JAN-2002 (first entry)
XX
DE UGT1 mutation correcting oligonucleotide SEQ ID NO: 3963.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;

KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 258; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 5 A; 6 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 338 CCAGGGCCGGCTGCTCT 354
|| ||||| |||||| |
Db 17 CCTGGGCCTGCTGCTGT 1

RESULT 760
ABA80848/c
ID ABA80848 standard; DNA; 17 BP.
XX
AC ABA80848;
XX
DT 24-JAN-2002 (first entry)
XX
DE LDLR mutation correcting oligonucleotide SEQ ID NO: 3694.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;

KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 245; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 0 A; 9 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 74 CGAGGGCCGCGCAGTGG 90
||| ||||| |||| ||
Db 17 CGAAGGCCGAGCAGGGG 1

RESULT 761
ABA77218
ID ABA77218 standard; DNA; 17 BP.
XX
AC ABA77218;
XX
DT 24-JAN-2002 (first entry)
XX
DE Adenosine deaminase deficiency correcting oligo SEQ ID NO: 64.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 44; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 89 GGACATCACCACGTCTG 105
|| || |||| ||||||
Db 1 GGCCACCACCTCGTCTG 17

RESULT 762
ABL47246
ID ABL47246 standard; RNA; 17 BP.
XX
AC ABL47246;
XX
DT 27-JUN-2003 (first entry)
XX
DE Human GRID Amberzyme substrate oligonucleotide #146.
XX
KW Human; Grb2-related with Insert Domain; GRID; T-cell;

KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW leukaemia; cytostatic; ss.
XX
OS Homo sapiens.
XX
PN WO200162911-A2.
XX
PD 30-AUG-2001.
XX
PF 23-FEB-2001; 2001WO-US005957.
XX
PR 24-FEB-2000; 2000US-0184594P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
XX
DR WPI; 2001-550088/61.
XX
PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain
PT (GRID) gene comprises using antisense and enzymatic nucleic acid
PT molecules such as hammerhead ribozymes.
XX
PS Claim 4; Page 88; 108pp; English.
XX
CC The present invention relates to oligonucleotides that downregulate the
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
CC for modulating the expression of GRID, to treat conditions such as
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be
CC administered in conjunction with other therapies such as radiation,
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was
CC used to illustrate the invention
XX
SQ Sequence 17 BP; 2 A; 2 C; 9 G; 0 T; 4 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 4.2e+02;
Matches 11; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

Qy 289 AGCTGGTGAAGGACCTG 305
|| :||:| ||| ||:|
Db 1 AGGUGGUGGAGGUCCUG 17

RESULT 763
ABN01488/c
ID ABN01488 standard; DNA; 17 BP.
XX
AC ABN01488;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1480.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 1480; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 3 A; 5 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 125 CGGCATGCTGGCCCGCC 141
|||| | |||||| |||
Db 17 CGGCTTCCTGGCCAGCC 1

RESULT 764
ABN01489/c
ID ABN01489 standard; DNA; 17 BP.
XX
AC ABN01489;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1481.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX

PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 1481; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 3 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 124 ACGGCATGCTGGCCCGC 140
|||||| | |||||| ||
Db 17 ACGGCTTCCTGGCCAGC 1

RESULT 765
ABN06221/c
ID ABN06221 standard; DNA; 17 BP.
XX
AC ABN06221;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6213.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 6213; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 4 A; 7 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy        291 CTGGTGAAGGACCTGAG 307
              ||| || |||||||| |
Db         17 CTGTTGCAGGACCTGGG 1


RESULT 766
ABN01022
ID   ABN01022 standard; DNA; 17 BP.
XX
AC   ABN01022;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1014.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 1014; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 8 A; 1 C; 8 G; 0 T; 0 U; 0 Other;

  Query Match              2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        206 GAAAGCAGAGAACTCGG 222
              ||||||||||||  ||
Db          1 GAAAGCAGAGAAGGAGG 17


RESULT 767
ABN00791/c
ID   ABN00791 standard; DNA; 17 BP.
XX
AC   ABN00791;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:783.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 783; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
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```
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 4 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        214 AGAACTCGGTGGCGGCC 230
              ||| |||||||  ||||
Db         17 AGATCTCGGTGCTGGCC 1


RESULT 768
ABN09029
ID   ABN09029 standard; DNA; 17 BP.
XX
AC   ABN09029;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9021.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 9021; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 5 A; 2 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        289 AGCTGGTGAAGGACCTG 305
              |||||| |||| || ||
Db          1 AGCTGGAGAAGTACGTG 17


RESULT 769
ABN09927/c
ID   ABN09927 standard; DNA; 17 BP.
XX
AC   ABN09927;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9919.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
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PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 9919; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 2 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         71 CTACGAGGGCCGCGCAG 87
              ||| ||||| | |||||
Db         17 CTAAGAGGGACTCGCAG 1
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RESULT 770
ABN01487/c
ID ABN01487 standard; DNA; 17 BP.
XX
AC ABN01487;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1479.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
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PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
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PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
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PA (AEOM-) AEOMICA INC.
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DR WPI; 2002-179446/23.
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PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 1479; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 4 A; 5 C; 7 G; 1 T; 0 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        126 GGCATGCTGGCCCGCCT 142
              ||| | |||||| ||||
Db         17 GGCTTCCTGGCCAGCCT 1
```

RESULT 771
ABQ63350
ID ABQ63350 standard; DNA; 17 BP.
XX
AC ABQ63350;
XX
DT 20-AUG-2002 (first entry)
XX
DE Human KTOM1a portion (ABQ63232) probe # 63.
XX
KW Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;

```
KW   kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200224750-A2.
XX
PD   28-MAR-2002.
XX
PF   21-SEP-2001; 2001WO-US029656.
XX
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   28-AUG-2001; 2001US-0315676P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Zhang J;
XX
DR   WPI; 2002-479509/51.
XX
PT   New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT   acids encoding the protein, useful for treating subjects having defects
PT   in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT   e.g., liver or bone.
XX
PS   Example 2; Page 165; 418pp; English.
XX
CC   The invention relates to a novel isolated nucleic acid encoding human
CC   KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
CC   invention has cytostatic activity. The nucleotide may have a use in gene
CC   therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
CC   monitor a disease caused by altered expression of human KTOM1.
CC   Compositions comprising the nucleic acids, proteins or antibodies may be
CC   used to treat subjects having defects in KTOM1 which can manifest as
CC   cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
CC   heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
CC   function. The sequence represents a probe used in the invention to scan
CC   the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX
SQ   Sequence 17 BP; 5 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         43 ATGGCCACCACTCAGAG 59
              ||| | ||| |||||||
Db          1 ATGACGACCGCTCAGAG 17


RESULT 772
ABQ63351
ID   ABQ63351 standard; DNA; 17 BP.
XX
AC   ABQ63351;
XX
DT   20-AUG-2002  (first entry)
XX
DE   Human KTOM1a portion (ABQ63232) probe # 64.
XX
KW   Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW   gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
KW   kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200224750-A2.
XX
PD   28-MAR-2002.
XX
PF   21-SEP-2001; 2001WO-US029656.
XX
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   28-AUG-2001; 2001US-0315676P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Zhang J;
XX
DR   WPI; 2002-479509/51.
XX
PT   New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT   acids encoding the protein, useful for treating subjects having defects
PT   in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT   e.g., liver or bone.
XX
PS   Example 2; Page 166; 418pp; English.
XX
CC   The invention relates to a novel isolated nucleic acid encoding human
CC   KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
CC   invention has cytostatic activity. The nucleotide may have a use in gene
CC   therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
CC   monitor a disease caused by altered expression of human KTOM1.
CC   Compositions comprising the nucleic acids, proteins or antibodies may be
CC   used to treat subjects having defects in KTOM1 which can manifest as
CC   cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
CC   heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
CC   function. The sequence represents a probe used in the invention to scan
CC   the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX
SQ   Sequence 17 BP; 4 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         44 TGGCCACCACTCAGAGG 60
              || | ||| |||||||
Db          1 TGACGACCGCTCAGAGG 17


RESULT 773
ABV85548
ID   ABV85548 standard; DNA; 17 BP.
XX
AC   ABV85548;
XX
DT   11-DEC-2002  (first entry)
XX
DE   Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:541.
XX
```

KW Human; UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10;
KW pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
KW ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN EP1243660-A2.
XX
PD 25-SEP-2002.
XX
PF 25-JAN-2002; 2002EP-00001161.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 30-AUG-2001; 2001US-0315984P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhang J, Gu Y, Nguyen C;
XX
DR WPI; 2002-724954/79.
XX
PT Nucleic acid encoding human UDP-GalNAc:polypeptide N-
PT cetylgalactosaminyltransferase 10 protein is useful to diagnose, prevent
PT and treat disorders associated with reduced or over expression of the
PT encoded protein.
XX
PS Example 2; SEQ ID NO 541; 59pp; English.
XX
CC The present invention describes an isolated nucleic acid (I) encoding a
CC human UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10 (pp-
CC GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to
CC chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the
CC present invention can be used in therapy, particularly to prevent or
CC treat a disorder associated with decreased expression or activity of pp-
CC GaNTase. The sequences given in ABV85011 to ABV86689 and ABP53502 to
CC ABP53504 are given in the exemplification of the present invention. N.B.
CC The sequence data for this patent is not represented in the printed
CC specification but is based on sequence information supplied by the
CC European Patent Office
XX
SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 403 TCTTCTACGTGATCGAG 419
|| ||| ||||| ||||
Db 1 TCATCTTCGTGAACGAG 17

RESULT 774
ABV85708
ID ABV85708 standard; DNA; 17 BP.
XX
AC ABV85708;
XX
DT 11-DEC-2002 (first entry)
XX
DE Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:701.
XX
KW Human; UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10;
KW pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
KW ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN EP1243660-A2.
XX
PD 25-SEP-2002.
XX
PF 25-JAN-2002; 2002EP-00001161.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 30-AUG-2001; 2001US-0315984P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhang J, Gu Y, Nguyen C;
XX
DR WPI; 2002-724954/79.
XX
PT Nucleic acid encoding human UDP-GalNAc:polypeptide N-
PT cetylgalactosaminyltransferase 10 protein is useful to diagnose, prevent
PT and treat disorders associated with reduced or over expression of the
PT encoded protein.
XX
PS Example 2; SEQ ID NO 701; 59pp; English.
XX
CC The present invention describes an isolated nucleic acid (I) encoding a
CC human UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10 (pp-
CC GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to
CC chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the
CC present invention can be used in therapy, particularly to prevent or
CC treat a disorder associated with decreased expression or activity of pp-
CC GaNTase. The sequences given in ABV85011 to ABV86689 and ABP53502 to
CC ABP53504 are given in the exemplification of the present invention. N.B.
CC The sequence data for this patent is not represented in the printed
CC specification but is based on sequence information supplied by the
CC European Patent Office
XX
SQ Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 284 CACCAAGCTGGTGAAGG 300
| ||| ||||||||||
Db 1 CCCCGGGCTGGTGAAGG 17

RESULT 775
ABV79551/c
ID ABV79551 standard; DNA; 17 BP.
XX
AC ABV79551;
XX
DT 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 797.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.

XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-00001167.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 23-MAY-2001; 2001US-00864761.
PR 09-OCT-2001; 2001US-0327898P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhan J;
XX
DR WPI; 2002-676582/73.
XX
PT Novel isolated human testis expressed Patched like protein (HTPL), useful
PT for identifying agonist and antagonist and specific binding partners, and
PT for treating subjects having defects in HTPL.
XX
PS Example 2; Page 168; 718pp; English.
XX
CC The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potenial therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 373 TCCTGGACCGCGACGAC 389
||||| |||||| || |
Db 17 TCCTGCACCGCGCCGTC 1

RESULT 776
ABV91033/c
ID ABV91033 standard; DNA; 17 BP.
XX
AC ABV91033;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1746.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 1746; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 4 A; 7 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 340 AGGGCCGGCTGCTCTAC 356
||||||||||| || |
Db 17 AGGGCCGGCTGTGCTTC 1

RESULT 777
ABL31783/c
ID ABL31783 standard; DNA; 17 BP.
XX
AC ABL31783;
XX
DT 21-MAR-2002 (first entry)
XX
DE Human HLA genotyping oligonucleotide SEQ ID NO 1272.
XX
KW Human; human leukocyte antigen; HLA; genotype; polymorphism;

KW immunogenetic; transplantation; genetic disease; ss.
XX
OS Homo sapiens.
XX
PN WO200192572-A1.
XX
PD 06-DEC-2001.
XX
PF 01-JUN-2001; 2001WO-JP004662.
XX
PR 01-JUN-2000; 2000JP-00164798.
XX
PA (NISN) NISSHINBO IND INC.
PA (SYST-) SYSTEM RES INC.
XX
PI Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;
XX
DR WPI; 2002-122074/16.
XX
PT Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
PT individuals e.g. by determining immunogenetic differences when
PT transplanting between them.
XX
PS Claim 10; Page 334; 345pp; Japanese.
XX
CC The invention relates to a typing kit for judging human leukocyte antigen
CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC genes e.g. belonging to HLA class I antigens on human genome and
CC containing gene polymorphisms as alloantigens have been immobilised as
CC primers for amplification of cleaved nucleic acids relating to gene
CC polymorphisms. The method is useful for judging HLA genotypes of
CC individuals by determining immunogenetic differences before transplanting
CC between them, providing genetic information to decide compatibility of
CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC diagnosis of genetic diseases and identifying individuals
XX
SQ Sequence 17 BP; 3 A; 7 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 304 TGAGCCCCGGGGACCGC 320
|||||| ||| | ||||
Db 17 TGAGCCGCGGTGTCCGC 1

RESULT 778
ABK56639/c
ID ABK56639 standard; RNA; 17 BP.
XX
AC ABK56639;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #1010.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
PN WO200211674-A2.
XX
PD 14-FEB-2002.
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTEX USA LLC.
PA (THOM/) THOMPSON J.
XX
PI Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX
DR WPI; 2002-217145/27.
XX
PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS Claim 4; Page 76; 152pp; English.
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 5 A; 6 C; 3 G; 0 T; 3 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 231 AAATCGGGAGGCTGCTT 247
|| | ||||||| |||
Db 17 AATTGGGGAGGCTCCTT 1

RESULT 779
ABZ95537/c
ID ABZ95537 standard; DNA; 17 BP.
XX
AC ABZ95537;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human endothelial nitric oxide synthase antisense fragment no.1401.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX

PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 10779; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 17 BP; 0 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 268 ACCTGGAGCAGGGCGGC 284
||| | |||||| ||||
Db 17 ACCGGCAGCAGGACGGC 1

RESULT 780
ABZ99035
ID ABZ99035 standard; DNA; 17 BP.
XX
AC ABZ99035;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human PDE4A-MTA oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX

PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 14277; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 87 GTGGACATCACCACGTC 103
|||| || ||||| |||
Db 1 GTGGCCAGCACCATGTC 17

RESULT 781
ABZ76563
ID ABZ76563 standard; DNA; 17 BP.
XX
AC ABZ76563;
XX
DT 29-APR-2003 (first entry)
XX
DE Lactobacillus brevis PCR primer ORF4 SEQ ID NO:66.
XX
KW Lactobacillus brevis; beer turbidity; beer clouding; beer; detection;
KW lactic acid bacteria; brewing; probe; PCR primer; ss.
XX
OS Lactobacillus brevis.
XX
PN WO200295028-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2002; 2002WO-JP005022.
XX
PR 23-MAY-2001; 2001JP-00154085.
XX
PA (KIRI) KIRIN BEER KK.
XX
PI Fujii T;
XX

```
DR   WPI; 2003-120803/11.
XX
PT   Polynucleotide probes and primers for detecting beer-clouding lactic acid
PT   bacteria, for quality control during beer production applicable in
PT   brewing industry.
XX
PS   Claim 7; Page 31; 94pp; Japanese.
XX
CC   The present invention describes a polynucleotide probe, or primer, for
CC   detecting beer-clouding lactic acid bacteria containing a nucleotide
CC   sequence of (I) with 8056 base pairs (see ABZ76501), or a nucleotide made
CC   from not less than 15 nucleotides hybridisable with its complementary
CC   sequence. Probes and primers from the present invention can be used for
CC   detecting beer-clouding lactic acid bacteria (Lactobacillus brevis) for
CC   quality control during beer production, which is applicable in the
CC   brewing industry. The present sequence represents a PCR primer for
CC   Lactobacillus brevis which is used in the exemplification of the present
CC   invention
XX
SQ   Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        225 GCGGCCAAATCGGGAGG 241
              || ||||||||| || |
Db          1 GCAGCCAAATCGTGATG 17


RESULT 782
ACC51810
ID   ACC51810 standard; DNA; 17 BP.
XX
AC   ACC51810;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human tumour suppressor sequence #577.
XX
KW   ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW   tumour regression; apoptosis; virus resistance; diagnosis;
KW   cellular degeneration.
XX
OS   Homo sapiens.
XX
PN   FR2826373-A1.
XX
PD   27-DEC-2002.
XX
PF   20-JUN-2001; 2001FR-00008139.
XX
PR   20-JUN-2001; 2001FR-00008139.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI   Tuijnder M,  Telerman A,  Amson R;
XX
DR   WPI; 2003-250498/25.
XX
PT   New nucleic acid sequences associated with tumor suppression, regression,
PT   apoptosis or virus resistance are useful to diagnose and treat viral
PT   disease, development of tumor cells and cell degeneration.
XX
PS   Claim 1; Page 173; 798pp; French.
XX
CC   This sequence represents an isolated nucleic acid sequence associated
CC   with tumour suppression or regression, apoptosis or virus resistance. The
CC   invention relates to these sequences or sequences having at least 80%
CC   identity to them, and polypeptides encoded by the sequences or
CC   polypeptides having 80% identity to the polypeptide sequences. The
CC   invention is used to diagnose or treat viral disease or disease
CC   characterized by development of tumour cells or cellular degeneration
XX
SQ   Sequence 17 BP; 6 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        273 GAGCAGGGCGGCACCAA 289
              || |||||| |||| ||
Db          1 GATCAGGGCAGCACTAA 17


RESULT 783
ACA99694
ID   ACA99694 standard; DNA; 17 BP.
XX
AC   ACA99694;
XX
DT   28-JUL-2003  (first entry)
XX
DE   G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #187.
XX
KW   Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour;
KW   G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003031621-A2.
XX
PD   17-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032599.
XX
PR   12-OCT-2001; 2001US-0329000P.
XX
PA   (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
PI   Zhang J;
XX
DR   WPI; 2003-381720/36.
XX
PT   New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing,
PT   investigating and/or treating disorders associated with aberrant
PT   expression or activity of GPCR-A-1, such as tumors and cancers.
XX
PS   Example 2; SEQ ID NO 211; 156pp; English.
XX
CC   The invention describes an isolated nucleic acid encoding a G protein
CC   coupled receptor (GPCR), mutations of which cause cancer, comprising a
CC   2225 or 1921 base pair sequence, or their degenerate variants, encoding a
CC   409 residue amino acid sequence, all given in the specification, with or
CC   without conservative amino acid substitutions, or complements of the
CC   sequence of them. The encoding nucleic acid is not more than 100 kbase in
CC   length. The methods and compositions of the present invention are useful
CC   for diagnosing, investigating and/or treating disorders associated with
CC   aberrant expression or activity of GPCR-A-1, such as tumours and cancers.
CC   This sequence represents an oligonucleotide used to analyse the gene
CC   encoding human G-protein coupled receptor GPCR-A-1
XX
SQ   Sequence 17 BP; 4 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        288 AAGCTGGTGAAGGACCT 304
              ||||||||   ||||||
Db          1 AAGCTGGTAGGGGACCT 17


RESULT 784
ABT37105/c
ID   ABT37105 standard; DNA; 17 BP.
```

XX
AC ABT37105;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 2742.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 353; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 2 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        287 CAAGCTGGTGAAGGACC 303
              ||||  ||||||||| |
Db         17 CAAGGAGGTGAAGGATC 1
```

RESULT 785
ABT34651/c
ID ABT34651 standard; DNA; 17 BP.
XX
AC ABT34651;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 288.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 67; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 3 A; 1 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy         92 CATCACCACGTCTGACC 108
              || |||||| ||||| |
Db         17 CAACACCACCTCTGATC 1
```

RESULT 786
ABT37464/c
ID ABT37464 standard; DNA; 17 BP.
XX
AC ABT37464;
XX
DT 12-JUN-2003 (first entry)

XX

DE Tumour suppression related human fukutin oligo SEQ ID No 3101.

XX

KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.

XX

OS Homo sapiens.

XX

PN WO2003025175-A2.

XX

PD 27-MAR-2003.

XX

PF 17-SEP-2002; 2002WO-IB004208.

XX

PR 17-SEP-2001; 2001FR-00011978.

XX

PA (MOLE-) MOLECULAR ENGINES LAB.

XX

PI Telerman A, Amson R, Tuijnder M;

XX

DR WPI; 2003-313353/30.

XX

PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.

XX

PS Disclosure; Page 395; 720pp; French.

XX

CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention

XX

SQ Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        302 CCTGAGCCCCGGGGACC 318
              ||||||||| || || |
Db         17 CCTGAGCCCAGGCGATC 1
```

RESULT 787
ACA07885
ID ACA07885 standard; RNA; 17 BP.

XX

AC ACA07885;

XX

DT 03-JUN-2003 (first entry)

XX

DE NFKB sub-unit modulating zinzyme substrate #284.

XX

KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.

XX

OS Homo sapiens.

XX

PN US2002177568-A1.

XX

PD 28-NOV-2002.

XX

PF 23-MAY-2001; 2001US-00864785.

XX

PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.

XX

PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.

XX

PI Stinchcomb DT, Mcswiggen J, Draper KG;

XX

DR WPI; 2003-340953/32.

XX

PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.

XX

PS Claim 3; Page 41; 72pp; English.

XX

CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule

XX

SQ Sequence 17 BP; 2 A; 6 C; 6 G; 0 T; 3 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   70.6%;  Pred. No. 4.2e+02;
  Matches   12;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;
```

```
Qy        342 GGCCGGCTGCTCTACAG 358
              ||| ||| ||:|: |||
Db          1 GGCUGGCAGCUCUCCAG 17
```

RESULT 788
ACA06444/c
ID ACA06444 standard; RNA; 17 BP.
XX
AC ACA06444;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating inozyme substrate #263.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 31; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 2 A; 9 C; 4 G; 0 T; 2 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        140 CCTGGCGGTGGAGGCCG 156
              | | | ||||||||||||
Db         17 CGTCGAGGTGGAGGCCG 1
```

RESULT 789
ACA06721/c
ID ACA06721 standard; RNA; 17 BP.
XX
AC ACA06721;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating inozyme substrate #540.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 35; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme

CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 2 A; 3 C; 5 G; 0 T; 7 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        180 TCCAAGGCACATATCCA 196
              ||||||| | | |||||
Db         17 TCCAAGGAAGACATCCA 1
```

RESULT 790
ACA09012
ID ACA09012 standard; RNA; 17 BP.
XX
AC ACA09012;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating amberzyme substrate #175.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 54; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 5 A; 3 C; 8 G; 0 T; 1 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 4.2e+02;
Matches 13; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

```
Qy        287 CAAGCTGGTGAAGGACC 303
              || ||:|| |||||| |
Db          1 CAGGCUGGGGAAGGAAC 17
```

RESULT 791
ADA99253/c
ID ADA99253 standard; DNA; 17 BP.
XX
AC ADA99253;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MDZ3 scanning oligonucleotide SEQ ID 242.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EP1281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.

XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 242; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 57 GAGGAGTCTCTGCACTA 73
|| |||||||| ||||
Db 17 GAAAAGTCTCTGGACTA 1

RESULT 792
ADA99417
ID ADA99417 standard; DNA; 17 BP.
XX
AC ADA99417;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MDZ3 scanning oligonucleotide SEQ ID 406.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EP1281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 406; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 2 A; 9 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 367 TCACTTTCCTGGACCGC 383
||||| ||||| ||||
Db 1 TCACTATCCTGCCCCGC 17

RESULT 793
ADB00316
ID ADB00316 standard; DNA; 17 BP.
XX
AC ADB00316;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MDZ3 scanning oligonucleotide SEQ ID 1302.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EP1281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 1302; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome

```
CC   15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC   or in manufacturing a medicament for treating or preventing a disorder
CC   associated with decreased or increased expression or activity of MDZ3,
CC   MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC   acids and proteins are also useful for diagnosing or monitoring a disease
CC   caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC   acids can also be used as probes to detect and characterize gross
CC   alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC   useful in constructing microarrays for measuring gene expression. The
CC   proteins are useful as therapeutic agents for gene therapy or as
CC   vaccines. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 17 BP; 6 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        291 CTGGTGAAGGACCTGAG 307
              ||| ||||| ||| |||
Db          1 CTGATGAAGCACCAGAG 17


RESULT 794
ADA99419
ID   ADA99419 standard; DNA; 17 BP.
XX
AC   ADA99419;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human MDZ3 scanning oligonucleotide SEQ ID 408.
XX
KW   Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW   zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW   chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW   developmental disorder; ss.
XX
OS   Homo sapiens.
XX
PN   EP1281758-A2.
XX
PD   05-FEB-2003.
XX
PF   30-JUL-2002; 2002EP-00016874.
XX
PR   02-AUG-2001; 2001US-00922181.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M,  Gu Y,  Nguyen C;
XX
DR   WPI; 2003-423107/40.
XX
PT   New zinc finger-containing proteins and nucleic acids, useful in
PT   manufacturing a medicament for treating or preventing a disorder
PT   associated with decreased or increased expression or activity of MDZ3,
PT   MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS   Example 8; SEQ ID NO 408; 103pp; English.
XX
CC   The present invention relates to novel human zinc finger-containing
CC   proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC   encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC   MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC   15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC   or in manufacturing a medicament for treating or preventing a disorder
CC   associated with decreased or increased expression or activity of MDZ3,
CC   MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC   acids and proteins are also useful for diagnosing or monitoring a disease
CC   caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC   acids can also be used as probes to detect and characterize gross
CC   alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC   useful in constructing microarrays for measuring gene expression. The
CC   proteins are useful as therapeutic agents for gene therapy or as
CC   vaccines. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 17 BP; 3 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        369 ACTTTCCTGGACCGCGA 385
              ||| |||||  ||||||
Db          1 ACTATCCTGCCCCGCGA 17


RESULT 795
ADA99415
ID   ADA99415 standard; DNA; 17 BP.
XX
AC   ADA99415;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human MDZ3 scanning oligonucleotide SEQ ID 404.
XX
KW   Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW   zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW   chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW   developmental disorder; ss.
XX
OS   Homo sapiens.
XX
PN   EP1281758-A2.
XX
PD   05-FEB-2003.
XX
PF   30-JUL-2002; 2002EP-00016874.
XX
PR   02-AUG-2001; 2001US-00922181.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M,  Gu Y,  Nguyen C;
XX
DR   WPI; 2003-423107/40.
XX
PT   New zinc finger-containing proteins and nucleic acids, useful in
PT   manufacturing a medicament for treating or preventing a disorder
PT   associated with decreased or increased expression or activity of MDZ3,
PT   MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS   Example 8; SEQ ID NO 404; 103pp; English.
XX
CC   The present invention relates to novel human zinc finger-containing
CC   proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC   encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC   MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC   15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC   or in manufacturing a medicament for treating or preventing a disorder
CC   associated with decreased or increased expression or activity of MDZ3,
CC   MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC   acids and proteins are also useful for diagnosing or monitoring a disease
CC   caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC   acids can also be used as probes to detect and characterize gross
CC   alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC   useful in constructing microarrays for measuring gene expression. The
CC   proteins are useful as therapeutic agents for gene therapy or as
CC   vaccines. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 17 BP; 2 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
```

```
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        365 CCTCACTTTCCTGGACC 381
              ||||||| |||||  ||
Db          1 CCTCACTATCCTGCCCC 17


RESULT 796
ADA99416
ID   ADA99416 standard; DNA; 17 BP.
XX
AC   ADA99416;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human MDZ3 scanning oligonucleotide SEQ ID 405.
XX
KW   Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW   zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW   chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW   developmental disorder; ss.
XX
OS   Homo sapiens.
XX
PN   EP1281758-A2.
XX
PD   05-FEB-2003.
XX
PF   30-JUL-2002; 2002EP-00016874.
XX
PR   02-AUG-2001; 2001US-00922181.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M,  Gu Y,  Nguyen C;
XX
DR   WPI; 2003-423107/40.
XX
PT   New zinc finger-containing proteins and nucleic acids, useful in
PT   manufacturing a medicament for treating or preventing a disorder
PT   associated with decreased or increased expression or activity of MDZ3,
PT   MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS   Example 8; SEQ ID NO 405; 103pp; English.
XX
CC   The present invention relates to novel human zinc finger-containing
CC   proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC   encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC   MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC   15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC   or in manufacturing a medicament for treating or preventing a disorder
CC   associated with decreased or increased expression or activity of MDZ3,
CC   MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC   acids and proteins are also useful for diagnosing or monitoring a disease
CC   caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC   acids can also be used as probes to detect and characterize gross
CC   alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC   useful in constructing microarrays for measuring gene expression. The
CC   proteins are useful as therapeutic agents for gene therapy or as
CC   vaccines. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 17 BP; 2 A; 9 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        366 CTCACTTTCCTGGACCG 382
              |||||| |||||  |||
Db          1 CTCACTATCCTGCCCCG 17


RESULT 797
ADA99418
ID   ADA99418 standard; DNA; 17 BP.
XX
AC   ADA99418;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human MDZ3 scanning oligonucleotide SEQ ID 407.
XX
KW   Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW   zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW   chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW   developmental disorder; ss.
XX
OS   Homo sapiens.
XX
PN   EP1281758-A2.
XX
PD   05-FEB-2003.
XX
PF   30-JUL-2002; 2002EP-00016874.
XX
PR   02-AUG-2001; 2001US-00922181.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M,  Gu Y,  Nguyen C;
XX
DR   WPI; 2003-423107/40.
XX
PT   New zinc finger-containing proteins and nucleic acids, useful in
PT   manufacturing a medicament for treating or preventing a disorder
PT   associated with decreased or increased expression or activity of MDZ3,
PT   MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS   Example 8; SEQ ID NO 407; 103pp; English.
XX
CC   The present invention relates to novel human zinc finger-containing
CC   proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC   encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC   MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC   15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC   or in manufacturing a medicament for treating or preventing a disorder
CC   associated with decreased or increased expression or activity of MDZ3,
CC   MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC   acids and proteins are also useful for diagnosing or monitoring a disease
CC   caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC   acids can also be used as probes to detect and characterize gross
CC   alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC   useful in constructing microarrays for measuring gene expression. The
CC   proteins are useful as therapeutic agents for gene therapy or as
CC   vaccines. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 17 BP; 2 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        368 CACTTTCCTGGACCGCG 384
              |||| |||||  |||||
Db          1 CACTATCCTGCCCCGCG 17


RESULT 798
ADB02421
ID   ADB02421 standard; DNA; 17 BP.
XX
AC   ADB02421;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human MDZ4 scanning oligonucleotide SEQ ID 3407.
```

XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EP1281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 3407; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 361 ACTTCCTCACTTTCCTG 377
|| |||||| ||| |||||
Db 1 AGTTCCTGACTATCCTG 17

RESULT 799
ACD57498
ID ACD57498 standard; RNA; 17 BP.
XX
AC ACD57498;
XX
DT 23-SEP-2003 (first entry)
XX
DE HCV DNAzyme substrate sequence #364.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 240; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 4 A; 7 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 272 GGAGCAGGGCGGCACCA 288
|| ||||||| |||||
Db 1 GGCGCAGGGCCACACCA 17

RESULT 800
ACD58952
ID ACD58952 standard; RNA; 17 BP.
XX
AC ACD58952;
XX

DT 24-SEP-2003 (first entry)
XX
DE HCV DNAzyme substrate sequence #1090.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
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PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 253; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 2 A; 5 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 4.2e+02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Qy 250 CGGGCTCGGCCACGGTG 266
||||:|||:|||:|
Db 1 CGGGAUCGGUCACCGUG 17

RESULT 801
ACD63717/c
ID ACD63717 standard; RNA; 17 BP.
XX
AC ACD63717;
XX
DT 30-SEP-2003 (first entry)
XX
DE HCV minus strand DNAzyme substrate sequence #1188.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 296; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene

```
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 3 A; 7 C; 5 G; 0 T; 2 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        251 GGGCTCGGCCACGGTGC 267
              ||| |||| ||| ||||
Db         17 GGGATCGGTCACCGTGC 1


RESULT 802
ACD65739/c
ID   ACD65739 standard; RNA; 17 BP.
XX
AC   ACD65739;
XX
DT   30-SEP-2003  (first entry)
XX
DE   HCV minus strand DNAzyme substrate sequence #2202.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 314; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 2 A; 4 C; 6 G; 0 T; 5 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        261 ACGGTGCACCTGGAGCA 277
              || ||||||| |||||
Db         17 ACCGTGCACCATGAGCA 1


RESULT 803
ACD65393
ID   ACD65393 standard; RNA; 17 BP.
XX
AC   ACD65393;
XX
DT   30-SEP-2003  (first entry)
XX
DE   HCV minus strand DNAzyme substrate sequence #2024.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
```

DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 311; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 2 A; 5 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 4.2e+02;
Matches 11; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

Qy 129 ATGCTGGCCCGCCTGGC 145
|:||:||| ||:|||
Db 1 AUGCUGGCAUUCCUGGC 17

RESULT 804
ACD63946
ID ACD63946 standard; RNA; 17 BP.
XX
AC ACD63946;
XX
DT 30-SEP-2003 (first entry)
XX
DE HCV minus strand DNAzyme substrate sequence #1305.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Claim 1; Page 298; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 8 G; 0 T; 2 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 4.2e+02;
Matches 12; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Qy 311 CGGGGACCGCGTGCTGG 327
|||||||||| :| : |
Db 1 CGGGGACCGCAUGGUAG 17

RESULT 805
ACD65050/c
ID ACD65050 standard; RNA; 17 BP.
XX
AC ACD65050;
XX
DT 30-SEP-2003 (first entry)
XX
DE HCV minus strand DNAzyme substrate sequence #1849.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.

```
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
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PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 308; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 1 A; 6 C; 5 G; 0 T; 5 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         42 GATGGCCACCACTCAGA 58
              || |||||| |||| ||
Db         17 GAGGGCCACAACTCGGA 1


RESULT 806
ACD62939
ID   ACD62939 standard; RNA; 17 BP.
XX
AC   ACD62939;
XX
DT   24-SEP-2003  (first entry)
XX
DE   HCV minus strand DNAzyme substrate sequence #802.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 289; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 4 A; 6 C; 7 G; 0 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        383 CGACGACGGCGCCAAGA 399
              |||| | |||||||| ||
Db          1 CGACCAGGGCGCCAGGA 17


RESULT 807
ACD64280/c
```

```
ID   ACD64280 standard; RNA; 17 BP.
XX
AC   ACD64280;
XX
DT   30-SEP-2003  (first entry)
XX
DE   HCV minus strand DNAzyme substrate sequence #1471.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
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PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 301; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 3 A; 8 C; 5 G; 0 T; 1 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        140 CCTGGCGGTGGAGGCCG 156
              ||||||||| | || ||
Db         17 CCTGGCGGTAGCGGTCG 1


RESULT 808
ACD51048
ID   ACD51048 standard; RNA; 17 BP.
XX
AC   ACD51048;
XX
DT   23-SEP-2003  (first entry)
XX
DE   HBV hammerhead ribozyme substrate sequence #361.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis B virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
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PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Example 1; Page 143; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
```

```
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HBV
CC   ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
CC   disclosed in the present invention
XX
SQ   Sequence 17 BP; 3 A; 2 C; 6 G; 0 T; 6 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 4.2e+02;
  Matches   10;  Conservative    4;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         62 GTCTCTGCACTACGAGG 78
              |:|: :| ||:| ||||
Db          1 GUCUUUGUACUAGGAGG 17


RESULT 809
ACC66898/c
ID   ACC66898 standard; DNA; 17 BP.
XX
AC   ACC66898;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Murine oligonucleotide associated with tumour supression, SEQ ID 4145.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; ss.
XX
OS   Mus musculus.
XX
PN   WO2003025176-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004210.
XX
PR   17-SEP-2001; 2001FR-00011979.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-333167/31.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 515; 738pp; French.
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ   Sequence 17 BP; 4 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         10 TGAAACTGCGGGTGACC 26
              || ||||| |||||| |
Db         17 TGCAACTGAGGGTGATC 1


RESULT 810
ACC63776/c
ID   ACC63776 standard; DNA; 17 BP.
XX
AC   ACC63776;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Murine oligonucleotide associated with tumour supression, SEQ ID 1023.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; ss.
XX
OS   Mus musculus.
XX
PN   WO2003025176-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004210.
XX
PR   17-SEP-2001; 2001FR-00011979.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-333167/31.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 150; 738pp; French.
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ   Sequence 17 BP; 4 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        240 GGCTGCTTCCCGGGCTC 256
              || |||||||| || ||
Db         17 GGATGCTTCCCAGGATC 1


RESULT 811
ADA50406/c
ID   ADA50406 standard; DNA; 17 BP.
XX
AC   ADA50406;
XX
DT   20-NOV-2003  (first entry)
XX
```

```
DE   Thermus scotoductus nucleic acid polymerase PCR primer SEQ ID NO:30.
XX
KW   nucleic acid polymerase; enzyme; Thermus scotoductus; DNA polymerase;
KW   salt tolerance; thermostability; PCR primer; ss.
XX
OS   Synthetic.
OS   Thermus scotoductus.
XX
PN   WO2003066804-A2.
XX
PD   14-AUG-2003.
XX
PF   13-SEP-2002; 2002WO-US029102.
XX
PR   14-SEP-2001; 2001US-0322218P.
PR   30-NOV-2001; 2001US-0334489P.
XX
PA   (APPL-) APPLERA CORP.
PA   (BOLC/) BOLCHAKOVA E V.
PA   (ROZZ/) ROZZELLE J E.
XX
PI   Bolchakova EV,  Rozzelle JE;
XX
DR   WPI; 2003-663590/62.
XX
PT   New nucleic acid encoding a Thermus scotoductus strain X-1, ATCC Deposit
PT   No. 27978 nucleic acid polymerase, useful for producing nucleic acid
PT   polymerases having e.g., improved sequence discrimination or better salt
PT   tolerance.
XX
PS   Example 1; Page 79; 179pp; English.
XX
CC   The present invention describes isolated nucleic acids encoding nucleic
CC   acid polymerases from Thermus scotoductus. ALso described: (1) an
CC   isolated nucleic acid (I) encoding a nucleic acid polymerase from Thermus
CC   scotoductus strain X-1, ATCC Deposit No. 27978; (2) an isolated DNA
CC   polymerase polypeptide from Thermus scotoductus strain X-1, ATCC Deposit
CC   No. 27978; (3) an isolated nucleic acid (II) comprising any of a set of
CC   12 nucleic acid sequences (S1, see ADA50425 to ADA50436) which encodes a
CC   nucleic acid polymerase; (4) an isolated nucleic acid (III) encoding a
CC   nucleic acid polymerase comprising any of a set of 16 amino acid
CC   sequences (S2, see ADA50389 to ADA50404); (5) isolated nucleic acid
CC   polymerases comprising any of amino acid sequences S2; (6) vectors
CC   comprising (I), (II), or (III), and especially expression vectors in
CC   which the nucleic acid polymerase gene is operably linked to a promoter;
CC   (7) a host cell comprising an isolated nucleic acid molecule encoding a
CC   nucleic acid polymerase from Thermus scotoductus strain X-1, ATCC Deposit
CC   No. 27978; (8) a host cell comprising (I) or (II); (9) a kit comprising a
CC   container containing a nucleic acid polymerase comprising any of amino
CC   acid sequences S2; (10) preparing (M1) a nucleic acid polymerase
CC   comprising any of amino acid sequences S2 by incubating a host cell
CC   comprising an encoding nucleic acid under conditions sufficient for RNA
CC   transcription and translation; (11) a nucleic acid polymerase prepared by
CC   M1; (12) synthesising DNA (M2) comprising contacting a polypeptide
CC   comprising any of amino acid sequences S2 with a DNA under conditions
CC   sufficient to permit DNA polymerisation; (13) a method (M3) for
CC   thermocyclic amplification of nucleic acid; and (14) a method (M4) of
CC   primer extension. The nucleic acid is useful for producing nucleic acid
CC   polymerases having improved sequence discrimination, better salt
CC   tolerance or varying degrees of thermostability with applications e.g. in
CC   PCR and DNA sequencing. The present sequence represents a PCR primer for
CC   Thermus scotoductus nucleic acid polymerase, which is used in an example
CC   from the present invention.
XX
SQ   Sequence 17 BP; 3 A; 11 C; 1 G; 2 T; 0 U; 0 Other;

  Query Match              2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        141 CTGGCGGTGGAGGCCGG 157
              |||| ||||||||  ||
Db         17 CTGGAGGTGGAGGTGGG 1


RESULT 812
ACC79937/c
ID   ACC79937 standard; DNA; 17 BP.
XX
AC   ACC79937;
XX
DT   09-SEP-2003  (first entry)
XX
DE   Thermus oshimai nucleic acid polymerase PCR primer SEQ ID NO:30.
XX
KW   Thermus oshimai; nucleic acid polymerase; enzyme; DNA sequencing;
KW   amplification; reverse transcription; RNA amplification;
KW   primer extension; PCR primer; ss.
XX
OS   Thermus oshimai.
OS   Synthetic.
XX
PN   WO2003048310-A2.
XX
PD   12-JUN-2003.
XX
PF   22-NOV-2002; 2002WO-US037764.
XX
PR   30-NOV-2001; 2001US-0334798P.
XX
PA   (APPL-) APPLERA CORP.
XX
PI   Bolchakova E,  Rozzelle J;
XX
DR   WPI; 2003-505286/47.
XX
PT   New nucleic acid, useful for DNA sequencing or amplification, reverse
PT   transcription, RNA amplification or primer extension reactions.
XX
PS   Example 1; Page 50; 64pp; English.
XX
CC   The present invention describes a nucleic acid (I) encoding a nucleic
CC   acid polymerase or a derivative nucleic acid polymerase with a mutation
CC   that decreases 5-3' exonuclease activity or that reduces discrimination
CC   against dideoxynucleotide triphosphates. Also described: (1) a vector
CC   comprising the nucleic acid (I); (2) a host cell comprising the nucleic
CC   acid (I); (3) a nucleic acid polymerase or its derivative; (4) a kit
CC   comprising a container containing the nucleic acid polymerase of (3); (5)
CC   making the nucleic acid polymerase of (3); (6) synthesising a DNA; (7)
CC   thermocyclic amplification of nucleic acid; and (8) primer extending a
CC   DNA. The nucleic acid (I) is useful for DNA sequencing or amplification,
CC   reverse transcription, RNA amplification or primer extension reactions.
CC   The present sequence represents a PCR primer for Thermus oshimai nucleic
CC   acid polymerase, which is used in an example from the present invention
XX
SQ   Sequence 17 BP; 3 A; 11 C; 1 G; 2 T; 0 U; 0 Other;

  Query Match              2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        141 CTGGCGGTGGAGGCCGG 157
              |||| ||||||||  ||
Db         17 CTGGAGGTGGAGGTGGG 1


RESULT 813
ABT44053/c
ID   ABT44053 standard; DNA; 17 BP.
XX
AC   ABT44053;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Sequencing PCR primer 41 used during construction of B subtilis RB194.
XX
```

KW Hyaluronic acid; glycosaminoglycan; hyaluronan synthase; antirheumatic;
KW UDP-glucose 6-dehydrogenase; UDP-glucose pyrophosphorylase; orthopaedic;
KW UDP-N-acetylglucosamine; ophthalmological; dermatological; joint surgery;
KW eye; rheumatology; dermatology; adhesion; development; cell motility;
KW cancer; angiogenesis; wound healing; ss; PCR; primer.
XX
OS Bacillus subtilis subsp. subtilis str. 168.
OS Synthetic.
XX
PN WO2003054163-A2.
XX
PD 03-JUL-2003.
XX
PF 20-DEC-2002; 2002WO-US041067.
XX
PR 21-DEC-2001; 2001US-0342644P.
XX
PA (NOVO) NOVOZYMES BIOTECH INC.
XX
PI Sloma A, Behr R, Widner W, Tang M, Sternberg D, Brown S;
XX
DR WPI; 2003-559139/52.
XX
PT Producing a hyaluronic acid (e.g. for use in eye and joint surgery,
PT orthopedics, rheumatology or dermatology) comprises cultivating a
PT Bacillus host cell and recovering the hyaluronic acid from the
PT cultivation medium.
XX
PS Example 11; Page 52; 218pp; English.
XX
CC The invention relates to a novel method which comprises producing a
CC hyaluronic acid via cultivating a Bacillus host cell under conditions
CC suitable for production of the hyaluronic acid and subsequently
CC recovering the hyaluronic acid from the cultivation medium. The most
CC abundant heteropolysaccharides of the body are the glycosaminoglycans, of
CC which hyaluronic acid is an example. A number of enzymes are involved in
CC the biosynthesis of hyaluronic acid including hyaluronan synthase, UDP-
CC glucose 6-dehydrogenase, UDP-glucose pyrophosphorylase and UDP-N-
CC acetylglucosamine. The molecules of the invention demonstrate
CC ophthalmological, antirheumatic and dermatological activities, whilst the
CC method itself may be useful for producing a hyaluronan in a recombinant
CC host cell. The hyaluronan generated may be used in eye and joint surgery,
CC orthopaedics, rheumatology or dermatology and may exhibit further uses
CC within the fields of adhesion, development, cell motility, cancer,
CC angiogenesis and wound healing. The current sequence is that of the PCR
CC primer of the invention which was used during analysis of the enzymes
CC that play a role in the synthesis of hyaluronic acid
XX
SQ Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 84 GCAGTGGACATCACCAC 100
||||| ||| ||| |||
Db 17 GCAGTTGACGTCAACAC 1

RESULT 814
ADB43719/c
ID ADB43719 standard; DNA; 17 BP.
XX
AC ADB43719;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #4042.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 504; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 400 AGGTCTTCTACGTGATC 416
|| || |||| ||||||
Db 17 AGCTCCTCTAGGTGATC 1

RESULT 815
ADC81646/c
ID ADC81646 standard; DNA; 17 BP.
XX
AC ADC81646;
XX
DT 01-JAN-2004 (first entry)
XX
DE Leishmania elongation factor 1-alpha antisense PCR primer SEQ ID NO:20.
XX
KW elongation factor 1-alpha; EF-1alpha; pathogen; antibacterial; virucide;
KW fungicide; protozoacide; ss; primer; PCR.
XX
OS Leishmania braziliensis.
XX
PN WO2003037926-A1.
XX

PD 08-MAY-2003.
XX
PF 01-NOV-2002; 2002WO-CA001689.
XX
PR 01-NOV-2001; 2001CA-02360987.
PR 22-JAN-2002; 2002US-0349339P.
PR 22-JAN-2002; 2002US-0349371P.
PR 05-JUL-2002; 2002US-0393385P.
XX
PA (UYBR-) UNIV BRITISH COLUMBIA.
XX
PI Reiner NE, Tcherkassov A, Nandan D;
XX
DR WPI; 2003-482124/45.
XX
PT Testing of binding specificity of a compound to a conserved protein in a
PT pathogen useful in e.g. treatment of infectious diseases involves
PT comparing binding of the compound to the pathogen and host forms of the
PT protein.
XX
PS Example; SEQ ID NO 20; 64pp; English.
XX
CC The invention relates to a novel method for the testing of a compound for
CC specific binding to a conserved protein in a pathogen. The method
CC involves comparing binding of the compound to the pathogen and host forms
CC of the proteins comprise an insertion/deletion sequence (indel) not
CC present in the other forms of the pathogen and host. The binding to the
CC pathogen form and the absence of or reduced binding of the compound to
CC the host form indicates that the compound is capable of specific binding.
CC A compound of the invention has antibacterial, virucide, fungicide, and
CC protozoacide activity. The method is useful for testing a compound for
CC specific binding to a conserved protein in pathogens (e.g. virus,
CC bacteria, fungi, protozoa). The protein is conserved between a pathogen
CC and a host (e.g. plant or animal including mammal e.g. human). The
CC compound is useful as a diagnostic or therapeutic agent specific for the
CC pathogen form, for the preparation of a moiety for specific binding to
CC pathogen elongation factor 1-alpha, and for diagnosis and treatment of
CC infectious diseases (e.g. bacterial, viral, fungal and protozoal). The
CC present sequence is used in the exemplification of the invention.
XX
SQ Sequence 17 BP; 1 A; 7 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 26 CGAGGGCTGGGACGAAG 42
||| ||||| || ||||
Db 17 CGAAGGCTGCGAAGAAG 1

RESULT 816
ADD21033/c
ID ADD21033 standard; DNA; 17 BP.
XX
AC ADD21033;
XX
DT 15-JAN-2004 (first entry)
XX
DE Human GAP_N DNA 17-mer oligo #265.
XX
KW gene therapy; antibody therapy; modulator of GAPN;
KW GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
XX
OS Homo sapiens.
XX
PN WO2003033703-A2.
XX
PD 24-APR-2003.
XX
PF 11-OCT-2002; 2002WO-US032597.
XX
PR 15-OCT-2001; 2001US-0330323P.
XX
PA (AMSH) AMERSHAM BIOSCIENCES SV CORP.
XX
PI Zhang J;
XX
DR WPI; 2003-403224/38.
XX
PT Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
PT encoding the protein, useful for diagnosing, treating or preventing
PT disorders associated with increased expression or activity of the
PT protein.
XX
PS Example 2; SEQ ID NO 289; 149pp; English.
XX
CC The invention relates to an isolated human GTP-activator protein for Rab-
CC like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
CC (I), a sequence in which at least 95% of deviations from (I) are
CC conservative substitutions, or a fragment of at least 8 contiguous amino
CC acids of (I). The polypeptide is useful for identifying a specific
CC binding partner for itself, by contacting the polypeptide in vivo to a
CC potential binding partner and determining if the polypeptide binding
CC partner binds to the polypeptide. (I) and a nucleic acid encoding the
CC polypeptide (II) are useful for diagnosing or monitoring a disease caused
CC by altered expression of GAPN, by determining the level of expression of
CC GAPN in a sample of nucleic acids or proteins that derives from a subject
CC suspected to have the disease, alterations from a normal level of
CC expression providing diagnostic and/or monitoring information. (I), (II)
CC or agonist of (I) is useful for treating or preventing a disorder
CC associated with decreased expression or activity of GAPN, and an
CC antagonist of (I) is useful for treating or preventing a disorder
CC associated with increased expression or activity of GAPN (all claimed).
CC (I) is useful as immunogen to raise antibodies that specifically
CC recognize GAPN proteins. (II) is useful to drive in vivo expression of
CC GAPN proteins, and as hybridization probes to detect, characterize and
CC quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
CC genomic and transcript-derived nucleic acid samples. This sequence
CC represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
XX
SQ Sequence 17 BP; 2 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 254 CTCGGCCACGGTGCACC 270
| ||| ||||||| ||
Db 17 CGCGGGCACGGTGCTCC 1

RESULT 817
ADD20883
ID ADD20883 standard; DNA; 17 BP.
XX
AC ADD20883;
XX
DT 15-JAN-2004 (first entry)
XX
DE Human GAP_N DNA 17-mer oligo #115.
XX
KW gene therapy; antibody therapy; modulator of GAPN;
KW GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
XX
OS Homo sapiens.
XX
PN WO2003033703-A2.
XX
PD 24-APR-2003.
XX
PF 11-OCT-2002; 2002WO-US032597.
XX
PR 15-OCT-2001; 2001US-0330323P.
XX
PA (AMSH) AMERSHAM BIOSCIENCES SV CORP.

```
XX
PI   Zhang J;
XX
DR   WPI; 2003-403224/38.
XX
PT   Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
PT   encoding the protein, useful for diagnosing, treating or preventing
PT   disorders associated with increased expression or activity of the
PT   protein.
XX
PS   Example 2; SEQ ID NO 139; 149pp; English.
XX
CC   The invention relates to an isolated human GTP-activator protein for Rab-
CC   like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
CC   (I), a sequence in which at least 95% of deviations from (I) are
CC   conservative substitutions, or a fragment of at least 8 contiguous amino
CC   acids of (I). The polypeptide is useful for identifying a specific
CC   binding partner for itself, by contacting the polypeptide in vivo to a
CC   potential binding partner and determining if the polypeptide binding
CC   partner binds to the polypeptide. (I) and a nucleic acid encoding the
CC   polypeptide (II) are useful for diagnosing or monitoring a disease caused
CC   by altered expression of GAPN, by determining the level of expression of
CC   GAPN in a sample of nucleic acids or proteins that derives from a subject
CC   suspected to have the disease, alterations from a normal level of
CC   expression providing diagnostic and/or monitoring information. (I), (II)
CC   or agonist of (I) is useful for treating or preventing a disorder
CC   associated with decreased expression or activity of GAPN, and an
CC   antagonist of (I) is useful for treating or preventing a disorder
CC   associated with increased expression or activity of GAPN (all claimed).
CC   (I) is useful as immunogen to raise antibodies that specifically
CC   recognize GAPN proteins. (II) is useful to drive in vivo expression of
CC   GAPN proteins, and as hybridization probes to detect, characterize and
CC   quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
CC   genomic and transcript-derived nucleic acid samples. This sequence
CC   represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
XX
SQ   Sequence 17 BP; 3 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        377 GGACCGCGACGACGGCG 393
              ||||  |||||||| ||
Db          1 GGACTTCGACGACGCCG 17


RESULT 818
ADD20884
ID   ADD20884 standard; DNA; 17 BP.
XX
AC   ADD20884;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Human GAP_N DNA 17-mer oligo #116.
XX
KW   gene therapy; antibody therapy; modulator of GAPN;
KW   GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003033703-A2.
XX
PD   24-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032597.
XX
PR   15-OCT-2001; 2001US-0330323P.
XX
PA   (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
PI   Zhang J;
XX
DR   WPI; 2003-403224/38.
XX
PT   Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
PT   encoding the protein, useful for diagnosing, treating or preventing
PT   disorders associated with increased expression or activity of the
PT   protein.
XX
PS   Example 2; SEQ ID NO 140; 149pp; English.
XX
CC   The invention relates to an isolated human GTP-activator protein for Rab-
CC   like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
CC   (I), a sequence in which at least 95% of deviations from (I) are
CC   conservative substitutions, or a fragment of at least 8 contiguous amino
CC   acids of (I). The polypeptide is useful for identifying a specific
CC   binding partner for itself, by contacting the polypeptide in vivo to a
CC   potential binding partner and determining if the polypeptide binding
CC   partner binds to the polypeptide. (I) and a nucleic acid encoding the
CC   polypeptide (II) are useful for diagnosing or monitoring a disease caused
CC   by altered expression of GAPN, by determining the level of expression of
CC   GAPN in a sample of nucleic acids or proteins that derives from a subject
CC   suspected to have the disease, alterations from a normal level of
CC   expression providing diagnostic and/or monitoring information. (I), (II)
CC   or agonist of (I) is useful for treating or preventing a disorder
CC   associated with decreased expression or activity of GAPN, and an
CC   antagonist of (I) is useful for treating or preventing a disorder
CC   associated with increased expression or activity of GAPN (all claimed).
CC   (I) is useful as immunogen to raise antibodies that specifically
CC   recognize GAPN proteins. (II) is useful to drive in vivo expression of
CC   GAPN proteins, and as hybridization probes to detect, characterize and
CC   quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
CC   genomic and transcript-derived nucleic acid samples. This sequence
CC   represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
XX
SQ   Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        378 GACCGCGACGACGGCGC 394
              |||  |||||||| |||
Db          1 GACTTCGACGACGCCGC 17


RESULT 819
ADD21031/c
ID   ADD21031 standard; DNA; 17 BP.
XX
AC   ADD21031;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Human GAP_N DNA 17-mer oligo #263.
XX
KW   gene therapy; antibody therapy; modulator of GAPN;
KW   GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003033703-A2.
XX
PD   24-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032597.
XX
PR   15-OCT-2001; 2001US-0330323P.
XX
PA   (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
PI   Zhang J;
XX
DR   WPI; 2003-403224/38.
```

```
XX
PT   Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
PT   encoding the protein, useful for diagnosing, treating or preventing
PT   disorders associated with increased expression or activity of the
PT   protein.
XX
PS   Example 2; SEQ ID NO 287; 149pp; English.
XX
CC   The invention relates to an isolated human GTP-activator protein for Rab-
CC   like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
CC   (I), a sequence in which at least 95% of deviations from (I) are
CC   conservative substitutions, or a fragment of at least 8 contiguous amino
CC   acids of (I). The polypeptide is useful for identifying a specific
CC   binding partner for itself, by contacting the polypeptide in vivo to a
CC   potential binding partner and determining if the polypeptide binding
CC   partner binds to the polypeptide. (I) and a nucleic acid encoding the
CC   polypeptide (II) are useful for diagnosing or monitoring a disease caused
CC   by altered expression of GAPN, by determining the level of expression of
CC   GAPN in a sample of nucleic acids or proteins that derives from a subject
CC   suspected to have the disease, alterations from a normal level of
CC   expression providing diagnostic and/or monitoring information. (I), (II)
CC   or agonist of (I) is useful for treating or preventing a disorder
CC   associated with decreased expression or activity of GAPN, and an
CC   antagonist of (I) is useful for treating or preventing a disorder
CC   associated with increased expression or activity of GAPN (all claimed).
CC   (I) is useful as immunogen to raise antibodies that specifically
CC   recognize GAPN proteins. (II) is useful to drive in vivo expression of
CC   GAPN proteins, and as hybridization probes to detect, characterize and
CC   quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
CC   genomic and transcript-derived nucleic acid samples. This sequence
CC   represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
XX
SQ   Sequence 17 BP; 2 A; 7 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        256 CGGCCACGGTGCACCTG 272
              ||| |||||||| || |
Db         17 CGGGCACGGTGCTCCAG 1


RESULT 820
ADD20885
ID   ADD20885 standard; DNA; 17 BP.
XX
AC   ADD20885;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Human GAP_N DNA 17-mer oligo #117.
XX
KW   gene therapy; antibody therapy; modulator of GAPN;
KW   GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003033703-A2.
XX
PD   24-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032597.
XX
PR   15-OCT-2001; 2001US-0330323P.
XX
PA   (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
PI   Zhang J;
XX
DR   WPI; 2003-403224/38.
XX
PT   Novel human GTP-activator protein for Rab-like GTPase and polynucleotide
PT   encoding the protein, useful for diagnosing, treating or preventing
PT   disorders associated with increased expression or activity of the
PT   protein.
XX
PS   Example 2; SEQ ID NO 141; 149pp; English.
XX
CC   The invention relates to an isolated human GTP-activator protein for Rab-
CC   like GTPase (GAPN) polypeptide (I), a sequence having 65% identity to
CC   (I), a sequence in which at least 95% of deviations from (I) are
CC   conservative substitutions, or a fragment of at least 8 contiguous amino
CC   acids of (I). The polypeptide is useful for identifying a specific
CC   binding partner for itself, by contacting the polypeptide in vivo to a
CC   potential binding partner and determining if the polypeptide binding
CC   partner binds to the polypeptide. (I) and a nucleic acid encoding the
CC   polypeptide (II) are useful for diagnosing or monitoring a disease caused
CC   by altered expression of GAPN, by determining the level of expression of
CC   GAPN in a sample of nucleic acids or proteins that derives from a subject
CC   suspected to have the disease, alterations from a normal level of
CC   expression providing diagnostic and/or monitoring information. (I), (II)
CC   or agonist of (I) is useful for treating or preventing a disorder
CC   associated with decreased expression or activity of GAPN, and an
CC   antagonist of (I) is useful for treating or preventing a disorder
CC   associated with increased expression or activity of GAPN (all claimed).
CC   (I) is useful as immunogen to raise antibodies that specifically
CC   recognize GAPN proteins. (II) is useful to drive in vivo expression of
CC   GAPN proteins, and as hybridization probes to detect, characterize and
CC   quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both
CC   genomic and transcript-derived nucleic acid samples. This sequence
CC   represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
XX
SQ   Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 4.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        379 ACCGCGACGACGGCGCC 395
              ||  |||||||| ||||
Db          1 ACTTCGACGACGCCGCC 17


RESULT 821
AAQ22266/c
ID   AAQ22266 standard; DNA; 18 BP.
XX
AC   AAQ22266;
XX
DT   20-JUL-1992  (first entry)
XX
DE   Methylphosphonate oligomer #0059 complementary to HSV-1 polyA signal.
XX
KW   Herpes Simplex Virus; type 1; beta-gene; UL5; DNA dependent ATPase; ss.
XX
OS   Synthetic.
XX
PN   WO9203051-A.
XX
PD   05-MAR-1992.
XX
PF   15-AUG-1990;   90US-00568501.
XX
PR   15-AUG-1990;   90US-00568501.
XX
PA   (GENT-) GENTA INC.
XX
PI   Roizman B,  Maxwell KW;
XX
DR   WPI; 1992-096516/12.
XX
PT   New oligomers complementary to viral genome(s) or mRNA transcripts -
PT   areanti-sense agents which interfere with viral replication of e.g.
PT   Herpes simplex virus, Epstein-Barr virus etc.
XX
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PS   Example 2; Page 20; 33pp; English.
XX
CC   This oligomer contains methylphosphonate linkages except for the first 5'
CC   linkage which is a phosphate diester bond. The oligomer is complementary
CC   to the area around the polyA signal of the HSV-1 UL5 gene. UL5 is one of
CC   the essential beta-genes and the protein it encodes forms a complex with
CC   two other proteins which functions as a primase and helicase. The protein
CC   specified by UL5 has also been shown to act as a DNA dependent ATPase.
CC   The oligomer can interfere with expression and function of the gene. See
CC   also AAQ22247-Q22283
XX
SQ   Sequence 18 BP; 2 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        327 GCGGCGGACGACCAGGG 343
              ||| ||| ||| |||||
Db         18 GCGACGGGCGATCAGGG 2


RESULT 822
AAQ41689
ID   AAQ41689 standard; DNA; 18 BP.
XX
AC   AAQ41689;
XX
DT   25-MAR-2003  (revised)
DT   24-AUG-1993  (first entry)
XX
DE   Probe RAP14 for Class I HLA DNA allele B region C.
XX
KW   Amplification; allelic variants; A; B; C; alleles; exon; diagnosis;
KW   tissue typing; forensic testing; susceptibility; PCR; ss.
XX
OS   Synthetic.
XX
PN   EP540997-A1.
XX
PD   12-MAY-1993.
XX
PF   28-OCT-1992;   92EP-00118396.
XX
PR   05-NOV-1991;   91US-00788113.
XX
PA   (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI   Bugawan T,  Erlich HA;
XX
DR   WPI; 1993-153998/19.
XX
PT   Rapid HLA class I typing of sample nucleic acid - by amplifying second or
PT   third exon sequences then hybridising with set of specific probes, useful
PT   e.g. in tissue typing and forensic tests.
XX
PS   Disclosure; Page 7; 23pp; English.
XX
CC   The HLA Class I DNA type of nucleic acid in a sample may be determined by
CC   amplifying any DNA contg. a Class I HLA allele second and/or third exon,
CC   hybridising the PCR prod. with probes which only hybridise to exactly
CC   complementary sequences and detecting the pattern of hybridisation given,
CC   which is indicative of the Class I HLA allele of the sample. The A, B and
CC   opt. C alleles are amplified by PCR using pairs of nucleotide primers.
CC   Specific primers for exon 2 are DB308 and DB309 and for the third exon
CC   are DB311 and DB337. A panel of sequence specific oligonucleotide probes
CC   (SSOs) is used to detect the HLA A and B allelic variants not
CC   distinguishable by serological, cellular or biochemical methods. The
CC   region identifies the polymorphic codons of the second exon of Class I
CC   HLA A or B alleles to which the probe hybridises. Region A includes
CC   codons 9-12 of exon 2 of both A and B alleles. Region B includes codons
CC   62 and 63 of exon 2 of A alleles. Region C includes codons 65-67 of exon
CC   2 of A alleles and codons 69-71 of B alleles. Region D includes codons 73
CC   -77 of exon 2 of A alleles. Specific applications include tissue typing,
CC   identification of individuals (e.g. in forensic tests) and detecting
CC   susceptibility to disease. See also AAQ41656-94. (Updated on 25-MAR-2003
CC   to correct PN field.)
XX
SQ   Sequence 18 BP; 6 A; 6 C; 5 G; 1 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        174 TACGAGTCCAAGGCACA 190
              ||| || || |||||||
Db          1 TACAAGGCCCAGGCACA 17


RESULT 823
AAQ53969
ID   AAQ53969 standard; DNA; 18 BP.
XX
AC   AAQ53969;
XX
DT   03-AUG-1995  (first entry)
XX
DE   Human OTC gene sense primer, binds to bases 21-39.
XX
KW   Human; OTC; identification; mutation; amplify; PCR; diagnosis;
KW   fluoresence-label; primer; electrophores; genetic disease;
KW   single stranded conformation polymorphism; SSCP; detection; ss.
XX
OS   Synthetic.
XX
PN   JP05317048-A.
XX
PD   03-DEC-1993.
XX
PF   30-SEP-1992;   92JP-00286605.
XX
PR   30-SEP-1991;   91JP-00280835.
XX
PA   (SHIO ) SHIONOGI & CO LTD.
PA   (MATS/) MATSUDA I.
XX
DR   WPI; 1994-011017/02.
XX
PT   Gene mutation identification for genetic disease diagnosis - includes
PT   specific gene or fragment amplification by polymerase chain reaction
PT   using fluorescence-labelled primer and electrophoresising.
XX
PS   Disclosure; Page 12; 14pp; Japanese.
XX
CC   The sequences given in AAQ53956-78 are primers which were used in the
CC   method of the invention to detect mutations in the human OTC gene. The
CC   gene is amplified by PCR using a fluoresence-labelled primer and the
CC   amplified gene or fragment is electrophoresed by single stranded
CC   conformation polymorphism (SSCP) and detecting the mutated gene via the
CC   primer. This method can be used to detect the presence of mutation in a
CC   gene with a precission equal to or higher than that of RI-labelling
CC   methods. This method may be used in the diagnosis of genetic disease
XX
SQ   Sequence 18 BP; 6 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        268 ACCTGGAGCAGGGCGGC 284
              ||||||||||||   ||
Db          2 ACCTGGAGCAGGAATGC 18


RESULT 824
AAT05082
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```
ID   AAT05082 standard; DNA; 18 BP.
XX
AC   AAT05082;
XX
DT   25-MAR-2003  (revised)
DT   26-FEB-1996  (first entry)
XX
DE   HLA-A1 PCR primer (sense, exon 2).
XX
KW   MAGE; tumour rejection antigen; cancer; diagnosis;
KW   polymerase chain reaction; PCR; primer; HLA-A1; ss.
XX
OS   Synthetic.
XX
PN   WO9523874-A1.
XX
PD   08-SEP-1995.
XX
PF   23-FEB-1995;   95WO-US002203.
XX
PR   01-MAR-1994;   94US-00204727.
PR   10-MAR-1994;   94US-00209172.
PR   01-SEP-1994;   94US-00299849.
PR   30-NOV-1994;   94US-00346774.
XX
PA   (LUDW-) LUDWIG INST CANCER RES.
XX
PI   De Plaen E,  Boon-Falleur T,  Lethe B,  Szikora J,  De Smet C;
PI   Chomez P,  Gaugler B,  Van Den Eynde B,  Brasseur F,  Patard J;
PI   Weynants P,  Marchand M,  Van Der Bruggen P;
XX
DR   WPI; 1995-320586/41.
XX
PT   Determn. of cancerous condition(s) - using a nucleic acid as a primer to
PT   determine expression of a MAGE tumour rejection antigen precursor.
XX
PS   Claim 9; Page 91; 121pp; English.
XX
CC   A PCR primer pair (AAT05082-83) correspond to a sense sequence in exon 2
CC   of HLA-A1 antigen and an antisense sequence in exon 3, respectively. The
CC   primers were used in PCR and RT-PCR with tumour rejection antigen
CC   precursor MAGE gene-based primers to detect MAGE gene expression in
CC   tumours and normal tissues. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 18 BP; 4 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        295 TGAAGGACCTGAGCCCC 311
              || ||||||  ||| |||
Db          1 TGGAGGACCAGAGGCCC 17


RESULT 825
AAT94827
ID   AAT94827 standard; DNA; 18 BP.
XX
AC   AAT94827;
XX
DT   19-FEB-1998  (first entry)
XX
DE   Human leukocyte antigen class I gene URSTO probe 454-471.
XX
KW   Human leukocyte antigen; HLA; probe; tissue transplantation; MHC gene;
KW   major histocompatibility complex; paternity test; forensic medicine;
KW   haematological malignancy; inherited disorder; adoptive immunotherapy;
KW   identification; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9720197-A2.
XX
PD   05-JUN-1997.
XX
PF   29-NOV-1996;   96WO-GB002959.
XX
PR   29-NOV-1995;   95GB-00024381.
XX
PA   (NOLA-) NOLAN BONE MARROW TRUST ANTHONY.
XX
PI   Arguello R,  Avakian H,  Madrigal A;
XX
DR   WPI; 1997-310717/28.
XX
PT   Identifying unknown allele(s) of a poly:allelic gene using panel of
PT   probes each recognising a sequence motif present in some allele(s) -
PT   useful for donor matching in tissue transplantation.
XX
PS   Claim 5; Page 19; 64pp; English.
XX
CC   A novel method has been developed for identifying an unknown allele of a
CC   polyallelic gene. The method involves: (a) contacting the unknown allele
CC   with a panel of probes, each of which recognises a sequence motif that is
CC   present in some alleles of the polyallelic gene but not in others; (b)
CC   observing which probes recognise the unknown allele so as to obtain a
CC   fingerprint of the unknown allele; and (c) comparing the fingerprint with
CC   fingerprints of known alleles. The present sequence represents a
CC   specifically claimed probe for use in the method where the polyallelic
CC   gene is a human leukocyte antigen class I gene. The method can be used
CC   for genes such as mammalian MHC genes, specifically the HLA class I and
CC   II genes, the T cell receptor genes in mammals, TAP, LMP, ras,
CC   nonclassical HLA class I genes, human complement factor genes C4 and C2,
CC   Bf in the HLA complex, and genes located in mitochondrial DNA, bacterial
CC   chromosomes and viral DNA. The method is particularly useful for matching
CC   the alleles of the HLA genes in a prospective donor and a prospective
CC   recipient in tissue or organ transplantations. The method can also be
CC   used in paternity testing, in forensic medicine, as a follow up technique
CC   in treatment of haematological malignancies or inherited disorders, in
CC   adoptive immunotherapy, and in identification of bacteria and viruses.
CC   The method can provide for the identification of alleles of the
CC   polyallelic genes using a limited number of selected recurring motif
CC   probes
XX
SQ   Sequence 18 BP; 2 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        298 AGGACCTGAGCCCCGGG 314
              ||||||| || || ||
Db          2 AGGACCTGCGCTCCTGG 18


RESULT 826
AAX75558
ID   AAX75558 standard; RNA; 18 BP.
XX
AC   AAX75558;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hairpin ribozyme substrate #17.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
```

```
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 185; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 18 BP; 3 A; 6 C; 6 G; 0 T; 3 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   70.6%;  Pred. No. 4.7e+02;
  Matches   12;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        238 GAGGCTGCTTCCCGGGC 254
              ||| |:||: | |||||
Db          2 GAGACUGCUCCACGGGC 18


RESULT 827
AAX62760
ID   AAX62760 standard; RNA; 18 BP.
XX
AC   AAX62760;
XX
DT   16-JUL-1999  (first entry)
XX
DE   Granule bound starch synthase hairpin substrate SEQ ID NO:635.
XX
KW   Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;
KW   granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;
KW   modulation; gene expression; transgenic plant; cleavage; canola plant;
KW   caffeine synthesis; coffee plant; nicotine production; tobacco;
KW   fruit ripening; flower pigmentation; lignin production; ss.
XX
OS   Zea mays.
XX
PN   WO9710328-A2.
XX
PD   20-MAR-1997.
XX
PF   12-JUL-1996;   96WO-US011689.
XX
PR   13-JUL-1995;   95US-0001135P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (DOWC ) DOWELANCO.
XX
PI   Zwick MG,  Edington BE,  Mcswiggen JA,  Merlo PAO,  Guo L,  Skokut TA;
PI   Young SA,  Folkerts O,  Merlo DJ;
XX
DR   WPI; 1997-202224/18.
XX
PT   Ribozyme which modulates plant gene expression - preferably modulates
PT   expression of DELTA-9 desaturase or granule bound starch synthase in
PT   maize or canola.
XX
PS   Claim 42; Page 84; 155pp; English.
XX
CC   The present invention describes an enzymatic nucleic acid molecule (I)
CC   with RNA cleaving activity, which modulates the expression of a plant
CC   gene. Also described is a gene comprising a cDNA sequence encoding maize
CC   Delta-9 desaturase. (I) can be used to modulate expression of a gene,
CC   preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)
CC   gene, in a plant (preferably a maize or canola plant). (I) can be used to
CC   modulate caffeine synthesis in a coffee plant, nicotine production in a
CC   tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
CC   or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
CC   marigold plant or lignin production in a tobacco, aspen, poplar or pine
CC   plant
XX
SQ   Sequence 18 BP; 2 A; 6 C; 7 G; 0 T; 3 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   70.6%;  Pred. No. 4.7e+02;
  Matches   12;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        121 AGTACGGCATGCTGGCC 137
              ||: |||| :|| ||||
Db          2 AGUUCGGCCUGCAGGCC 18


RESULT 828
AAV60768
ID   AAV60768 standard; DNA; 18 BP.
XX
AC   AAV60768;
XX
DT   25-MAR-2003  (revised)
DT   08-DEC-1998  (first entry)
XX
DE   HIV-1 strain YBF30 gag gene primer GAG Y S1.1.
XX
KW   HIV-1 strain YBF30; antibody; oligonucleotide; diagnosis; immunisation;
KW   infection; typing; gag; PCR primer; amplification; ss.
XX
OS   Synthetic.
OS   Human immunodeficiency virus 1.
XX
PN   FR2756843-A1.
XX
PD   12-JUN-1998.
XX
PF   09-DEC-1996;   96FR-00015087.
XX
PR   09-DEC-1996;   96FR-00015087.
XX
PA   (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
PA   (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.
PA   (INSP ) INST PASTEUR.
XX
PI   Mauclere P,  Loussert AI,  Simon F,  Saragosti S,  Barre SF;
XX
DR   WPI; 1998-336114/30.
XX
PT   Non-M, non-O HIV-1 strain YBF30 - useful for diagnosis and immunisation.
XX
PS   Claim 3; Fig 1; 85pp; French.
XX
CC   This sequence represents a primer targeted to the gag gene of the non-M
CC   (major), non-O (Outlier) HIV-1 strain YBF30 (CNCM I-1753), isolated from
CC   the Cameroon. The HIV strain (see AAV60751 for complete genome),
```

CC peptides, antibodies and oligonucleotides derived from it (see AAV60752-
CC V60798 and AAW68473-W68482) are used for diagnosis of or immunisation
CC against non-M, non-O HIV-1 infections. The oligonucleotides, peptides and
CC antibodies can also be used for typing HIV strains. (Updated on 25-MAR-
CC 2003 to correct PI field.)
XX
SQ Sequence 18 BP; 6 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 55 CAGAGGAGTCTCTGCAC 71
||||| | |||||| ||
Db 2 CAGAGAACTCTCTGTAC 18

RESULT 829
AAV34526/c
ID AAV34526 standard; DNA; 18 BP.
XX
AC AAV34526;
XX
DT 20-AUG-1998 (first entry)
XX
DE Chemokine receptor CXCR4 amplifying RT-PCR primer 2.
XX
KW Chemokine receptor; gp120; fusion protein; HIV; screening; AIDS;
KW CD4 binding site; RT-PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9815569-A1.
XX
PD 16-APR-1998.
XX
PF 08-OCT-1997; 97WO-US018397.
XX
PR 09-OCT-1996; 96US-0027931P.
XX
PA (DAND) DANA FARBER CANCER INST INC.
PA (LEUK-) LEUKOSITE INC.
PA (CHIL-) CHILDRENS MEDICAL CENT.
XX
PI Sodroski J, Newman W, Wu L, Gerard N, Gerard C;
XX
DR WPI; 1998-240778/21.
XX
PT Derivatives of gp120 containing modified chemokine receptor binding site
PT - and complexes with soluble CD40, for inhibiting infectivity of human
PT immune deficiency virus and to screen for inhibitors.
XX
PS Example; Page 53; 92pp; English.
XX
CC This primer is used for the RT-PCR amplification of a chemokine receptor
CC CXCR4. The invention provides gp120 derivative having a conformational,
CC discontinuous chemokine receptor binding site defined by amino acids
CC residues present in the gp120 constant regions C2, C3 and C4, and the
CC variable region V3, and its conformation is similar to that of the
CC receptor binding site of wild-type gp120 complexed to CD4. Exposure of
CC the chemokine receptor binding site is increased by having at least part
CC of a variable or constant region of wild-type gp120 removed. A stabilised
CC complex of gp120 CD4 binding site with a soluble CD4 molecule is used to
CC inhibit infectivity of human immune deficiency virus (HIV). Labelled
CC gp120 derivatives are also used to screen for inhibitors of HIV
CC infectivity. The gp120 derivatives are used for diagnosing susceptibility
CC to HIV infection from increased levels of the chemokine receptors (at the
CC protein or nucleic acid levels). Transgenic animals expressing CD4 and
CC chemokine receptor are used as models for studying development of AIDS or
CC effect/safety of therapeutic agents
XX
SQ Sequence 18 BP; 4 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 343 GCCGGCTGCTCTACAGC 359
|| |||||| ||||| |
Db 17 GCTGGCTGCCCTACAAC 1

RESULT 830
AAV46248/c
ID AAV46248 standard; DNA; 18 BP.
XX
AC AAV46248;
XX
DT 16-OCT-1998 (first entry)
XX
DE Human HLA-A primer #152.
XX
KW Histocompatibility locus antigen; HLA-A class I; human; class typing;
KW donor; host; tissue transplantation; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9826091-A2.
XX
PD 18-JUN-1998.
XX
PF 12-DEC-1997; 97WO-CA000955.
XX
PR 12-DEC-1996; 96US-00766189.
XX
PA (VISI-) VISIBLE GENETICS INC.
XX
PI Blasczyk RH, Leushner J;
XX
DR WPI; 1998-348544/30.
XX
PT HLA Class I typing - by primer-based amplification of target DNA using
PT group-specific untranslated region primer pair.
XX
PS Claim 8; Page 138; 185pp; English.
XX
CC AAV46054 and AAV46200-V46264 are primers used in isolating human
CC histocompatibility locus antigen (HLA-A) Class I alleles which are used
CC in a novel method of HLA Class I typing. The method involves combining a
CC group-specific untranslated region primer pair with a target DNA to allow
CC primer-based amplification of the DNA, and determining whether a nucleic
CC acid product is produced by the amplification. The ability of the primer
CC pair to produce a product is associated with a particular HLA group type.
CC The methods can be used for typing the 3 classical HLA Class I genes
CC (comprising the loci HLA-A, HLA-B, and HLA-C) in e.g. donors and hosts
CC for tissue transplantation. The initial group specific amplification
CC allows a PCR based separation of haplotypes in 95% of patient samples.
CC The subsequent sequencing can provide for high-resolution typing
XX
SQ Sequence 18 BP; 1 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 214 AGAACTCGGTGGCGGCC 230
| |||| || |||||||
Db 18 ACAACTGGGAGGCGGCC 2

RESULT 831
AAV39316/c
ID AAV39316 standard; cDNA; 18 BP.
XX

```
AC   AAV39316;
XX
DT   16-SEP-1998  (first entry)
XX
DE   Human RAD54 mutation detecting PCR primer SEQ ID NO:24.
XX
KW   Human; RAD54; hRAD54; cancer; xeroderma pigmentosum; Bloom syndrome;
KW   Werner's syndrome; ATR-X; diagnosis; detection; SNF2 superfamily;
KW   X-linked mental retardation with alpha-thalassemia syndrome; tumour;
KW   gene therapy; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   EP844305-A2.
XX
PD   27-MAY-1998.
XX
PF   10-NOV-1997;   97EP-00308998.
XX
PR   13-NOV-1996;   96US-0030676P.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
PA   (UYJE-) UNIV JEFFERSON THOMAS.
XX
PI   Croce CM,  Fishel RA,  Rasio D,  Robbins DJ;
XX
DR   WPI; 1998-274189/25.
XX
PT   Human hRAD54 DNA and polypeptide - and agonists, antibodies, antagonists,
PT   etc.
XX
PS   Claim 18; Page 39; 64pp; English.
XX
CC   The present sequence represents a PCR primer for use in a method of the
CC   invention for determining the genetic predisposition to cancer in an
CC   individual by detecting hRAD54 mutations in a sample. hRAD54 is a gene
CC   thought to be present in tumours that display allelic imbalance at Ip32,
CC   the chromosomal band identified as one of four minimal regions of
CC   chromosome 1 deletion in breast carcinomas. hRAD54 is useful for
CC   production of proteins, inter alia, that have been identified as novel
CC   hRAD54 by homology between the amino acid sequence given in AAW62186 and
CC   known amino acid sequences such as yeast RAD54. hRAD54 proteins are used
CC   in the treatment of cancer, including Xeroderma Pigmentosum and Bloom
CC   syndrome, Werner's syndromes and X-linked mental retardation with alpha-
CC   thalassaemia syndrome and breast cancer. hRAD54 polynucleotides are also
CC   useful for detecting complementary nucleotides for use as a diagnostic
CC   agent, especially useful for diagnosis of disease or susceptibility to
CC   diseases. hRAD54 polynucleotide, proteins, agonists and antagonists which
CC   are proteins are useful in gene therapy
XX
SQ   Sequence 18 BP; 3 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match              2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        286 CCAAGCTGGTGAAGGAC 302
              |||  |||||||||  ||
Db         18 CCAGCCTGGTGAAGAAC 2


RESULT 832
AAV60916/c
ID   AAV60916 standard; DNA; 18 BP.
XX
AC   AAV60916;
XX
DT   11-JAN-1999  (first entry)
XX
DE   Angiogenin antisense oligonucleotide JF12S.
XX
KW   Angiogenin; antisense; inhibitor; cancer; metastasis; angiogenesis;
KW   therapy; diagnosis; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .18
FT                    /*tag=  a
FT                    /note= "phosphorothioate linkages"
XX
PN   WO9842722-A1.
XX
PD   01-OCT-1998.
XX
PF   20-MAR-1998;   98WO-US005651.
XX
PR   21-MAR-1997;   97US-0041182P.
XX
PA   (HARD ) HARVARD COLLEGE.
XX
PI   Fett JW,  Olson KA;
XX
DR   WPI; 1998-531944/45.
XX
PT   New oligo:nucleotide(s) that inhibit expression of angiogenin - for
PT   treatment of tumours and metastases, or other conditions involving
PT   abnormal angiogenesis.
XX
PS   Claim 10; Page 38; 71pp; English.
XX
CC   Antisense phosphorothioate oligonucleotide JF10S encompasses the AUG
CC   initiation codon of the human angiogenin gene (see AAV60918). JF2S, and
CC   other claimed antisense oligonucleotides (see AAV60911-17) with base
CC   sequences complementary to a target region of the angiogenin gene, are
CC   able to inhibit expression of angiogenin. They are used in claimed
CC   methods to decrease production of angiogenin, particularly to reduce the
CC   size of tumours associated with angiogenesis, to inhibit metastases,
CC   establishment of tumour cells or growth of tumours and, when labelled, to
CC   detect angiogenenin for diagnosis of conditions associated with abnormal
CC   angiogenesis. They can also be used to treat a wide range of non-cancer
CC   conditions that involve angiogenesis, e.g. age-related macular
CC   degeneration, diabetic retinopathy, bacterial or fungal ulcers,
CC   rheumatoid arthritis, Paget's disease, Crohn's disease, haemangioma and
CC   many others listed
XX
SQ   Sequence 18 BP; 4 A; 9 C; 3 G; 2 T; 0 U; 0 Other;

  Query Match              2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        292 TGGTGAAGGACCTGAGC 308
              ||||||  ||  ||||  ||
Db         17 TGGTGATGGGCCTGGGC 1


RESULT 833
AAZ11707/c
ID   AAZ11707 standard; RNA; 18 BP.
XX
AC   AAZ11707;
XX
DT   02-NOV-1999  (first entry)
XX
DE   Hepatitis C virus antisense DNA 25 - binds to HCV genome bases 330-347.
XX
KW   Antisense; oligonucleotide; hepatitis C virus; antiviral therapy;
KW   detection; diagnosis; treatment; translation inhibition;
KW   replication inhibition; transcription inhibition; ss.
XX
OS   Synthetic.
OS   Hepatitis C virus.
XX
PN   WO9929350-A1.
```

```
XX
PD   17-JUN-1999.
XX
PF   08-DEC-1998;   98WO-US026040.
XX
PR   10-DEC-1997;   97US-00988321.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Anderson KP,  Hanecak RC,  Nozaki C;
XX
DR   WPI; 1999-493767/41.
XX
PT   New antisense oligonucleotides for treatment of Hepatitis C virus
PT   infections.
XX
PS   Example 3; Page 35; 61pp; English.
XX
CC   This sequence represents a specific example of an antisense
CC   oligonucleotide designed to be capable of hybridising to HCV genomic RNA.
CC   These oligonucleotides (AAZ08988-Z09005 and AAZ11701-Z11719) are 10-20
CC   bases long and are targetted to stretches of viral genome which include
CC   the polyprotein translation initiation codon. They inhibit the function
CC   of viral RNA by interfering with its replication, transcription into
CC   mRNA, translation into protein and packaging into viral particles,
CC   resulting in failure of all or a portion of the normal life cycle of the
CC   virus. In vivo studies in a murine model have found that a preferred
CC   antisense oligonucleotide, AAZ08993, is able to reduce HCV gene
CC   expression by around 50% compared with a control oligonucleotide
CC   (AAZ11718). The oligonucleotides are useful for the prevention and/or
CC   treatment of hepatitis C-associated disease. Oligonucleotides are also
CC   useful for detection and diagnosis of hepatitis C virus-associated
CC   diseases. The specificity of the oligonucleotides enables more effective
CC   prevention and treatment of HCV-associated diseases. They can also be
CC   used to differentiate between HCV-derived hepatitis and hepatitis caused
CC   by other agents
XX
SQ   Sequence 18 BP; 2 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        261 ACGGTGCACCTGGAGCA 277
              || ||||||| |||||
Db         18 ACCGTGCACCATGAGCA 2


RESULT 834
AAZ11716/c
ID   AAZ11716 standard; RNA; 18 BP.
XX
AC   AAZ11716;
XX
DT   02-NOV-1999  (first entry)
XX
DE   Hepatitis C virus antisense DNA 34 - binds to HCV genome bases 331-348.
XX
KW   Antisense; oligonucleotide; hepatitis C virus; antiviral therapy;
KW   detection; diagnosis; treatment; translation inhibition;
KW   replication inhibition; transcription inhibition; ss.
XX
OS   Synthetic.
OS   Hepatitis C virus.
XX
PN   WO9929350-A1.
XX
PD   17-JUN-1999.
XX
PF   08-DEC-1998;   98WO-US026040.
XX
PR   10-DEC-1997;   97US-00988321.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Anderson KP,  Hanecak RC,  Nozaki C;
XX
DR   WPI; 1999-493767/41.
XX
PT   New antisense oligonucleotides for treatment of Hepatitis C virus
PT   infections.
XX
PS   Example 3; Page 35; 61pp; English.
XX
CC   This sequence represents a specific example of an antisense
CC   oligonucleotide designed to be capable of hybridising to HCV genomic RNA.
CC   These oligonucleotides (AAZ08988-Z09005 and AAZ11701-Z11719) are 10-20
CC   bases long and are targetted to stretches of viral genome which include
CC   the polyprotein translation initiation codon. They inhibit the function
CC   of viral RNA by interfering with its replication, transcription into
CC   mRNA, translation into protein and packaging into viral particles,
CC   resulting in failure of all or a portion of the normal life cycle of the
CC   virus. In vivo studies in a murine model have found that a preferred
CC   antisense oligonucleotide, AAZ08993, is able to reduce HCV gene
CC   expression by around 50% compared with a control oligonucleotide
CC   (AAZ11718). The oligonucleotides are useful for the prevention and/or
CC   treatment of hepatitis C-associated disease. Oligonucleotides are also
CC   useful for detection and diagnosis of hepatitis C virus-associated
CC   diseases. The specificity of the oligonucleotides enables more effective
CC   prevention and treatment of HCV-associated diseases. They can also be
CC   used to differentiate between HCV-derived hepatitis and hepatitis caused
CC   by other agents
XX
SQ   Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        261 ACGGTGCACCTGGAGCA 277
              || ||||||| |||||
Db         17 ACCGTGCACCATGAGCA 1


RESULT 835
AAZ34321/c
ID   AAZ34321 standard; DNA; 18 BP.
XX
AC   AAZ34321;
XX
DT   07-DEC-1999  (first entry)
XX
DE   Human PRO298 PCR forward primer 3.
XX
KW   Human; PRO; EST; expressed sequence tag; PCR primer; hybridisation;
KW   probe; blood coagulation disorder; cancer; cellular adhesion disorder;
KW   secreted protein; transmembrane protein; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9946281-A2.
XX
PD   16-SEP-1999.
XX
PF   08-MAR-1999;   99WO-US005028.
XX
PR   10-MAR-1998;   98US-0077450P.
PR   11-MAR-1998;   98US-0077632P.
PR   11-MAR-1998;   98US-0077641P.
PR   11-MAR-1998;   98US-0077649P.
PR   12-MAR-1998;   98US-0077791P.
PR   13-MAR-1998;   98US-0078004P.
PR   17-MAR-1998;   98US-00040220.
PR   20-MAR-1998;   98US-0078886P.
PR   20-MAR-1998;   98US-0078910P.
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PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 31-MAR-1998; 98US-0080105P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080165P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080328P.
PR 01-APR-1998; 98US-0080333P.
PR 01-APR-1998; 98US-0080334P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 08-APR-1998; 98US-0081071P.
PR 09-APR-1998; 98US-0081195P.
PR 09-APR-1998; 98US-0081203P.
PR 09-APR-1998; 98US-0081229P.
PR 15-APR-1998; 98US-0081817P.
PR 15-APR-1998; 98US-0081838P.
PR 15-APR-1998; 98US-0081952P.
PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082700P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0082767P.
PR 23-APR-1998; 98US-0082796P.
PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083392P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0083496P.
PR 29-APR-1998; 98US-0083499P.
PR 29-APR-1998; 98US-0083500P.
PR 29-APR-1998; 98US-0083545P.
PR 29-APR-1998; 98US-0083554P.
PR 29-APR-1998; 98US-0083558P.
PR 29-APR-1998; 98US-0083559P.
PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 06-MAY-1998; 98US-0084441P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
PR 07-MAY-1998; 98US-0084637P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 13-MAY-1998; 98US-0085323P.
PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
PR 15-MAY-1998; 98US-0085573P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-0085697P.
PR 15-MAY-1998; 98US-0085700P.
PR 15-MAY-1998; 98US-0085704P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086414P.
PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087106P.
PR 28-MAY-1998; 98US-0087208P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
XX
PA (GETH) GENENTECH INC.
XX
PI Wood WI, Goddard A, Gurney A, Yuan J, Baker KP, Chen J;
XX
DR WPI; 1999-551358/46.
XX
PT New secreted and transmembrane polypeptides and their polynucleotides,
PT useful for treating blood coagulation disorders, cancers and cellular
PT adhesion disorders.
XX
PS Example 95; Page 257; 530pp; English.
XX
CC The present invention describes secreted and transmembrane polypeptides
CC and their polynucleotides. The nucleotide sequences are useful as sources
CC of probes, primers, for chromosome mapping, and for generation of
CC antisense sequences. They can also be used to create transgenic animals.
CC The proteins can be used to treat a variety of diseases and disorders,
CC depending on their function. Diseases that may be treated include blood
CC coagulation disorders, cancers and cellular adhesion disorders. They may
CC also be used to raise antibodies. AAZ33891 to AAZ34338, and AAY41685 to
CC AAY41774 represent polynucleotide and polypeptide sequence given in the
CC exemplification of the present invention
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
|||||||| |||| |||
Db 17 GGAGGTCGACTTCCACT 1

RESULT 836
AAX26293
ID AAX26293 standard; DNA; 18 BP.
XX
AC AAX26293;
XX
DT 26-MAY-1999 (first entry)
XX
DE Human PDE1B1 specific sense primer.
XX
KW Antisense oligodeoxynucleotide; phosphodiesterase; PDE1B1; enzyme; PDE;
KW cell death; apoptosis; cancer; Ca2+-calmodulin; lymphoblastoid; RNAse H;
KW RPMI 8392; RNA degradation; cAMP; immunoproliferative disorder; breast;
KW immune disfunction; acute lympholytic leukemia; prostate; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5885834-A.
XX
PD 23-MAR-1999.
XX
PF 30-SEP-1997; 97US-00940332.
XX
PR 30-SEP-1996; 96US-0027207P.
XX
PA (EPST/) EPSTEIN P M.
XX
PI Epstein PM;
XX
DR WPI; 1999-228548/19.
XX

PT Antisense oligodeoxynucleotides specific for mRNA encoding
PT phosphodiesterase PDE1B1 enzymes and method for using them to induce
PT apoptosis of cells - useful in the treatment of immunoproliferative
PT disorders and immune disfunctions.
XX
PS Disclosure; Col 15; 35pp; English.
XX
CC The invention relates to antisense oligodeoxynucleotides (AS-ODN) which
CC will bind to mRNA encoding phosphodiesterase PDE1B1 enzymes and their use
CC in inducing programmed cell death (apoptosis) in cancer cells. PDE1 is a
CC Ca2+-calmodulin dependent phosphodiesterase found in cytosolic extracts
CC of human lymphoblastoid cell line, RPMI 8392. The method in which
CC programmed cell death is induced in cancer cells comprises: (1)
CC identifying the phosphodiesterase enzyme PDE1B1 in a cell line containing
CC the cancer cells; (2) synthesising an AS-ODN inhibitor which will bind to
CC mRNA encoding PDE1B1; and (3) applying the AS-ODN to the cell line to
CC inhibit the enzymatic activity of the PDE1B1 and induce apoptosis in the
CC cells. The AS-ODNs inhibit the expression of a protein by two mechanisms:
CC (i) by degradation of RNA by the ubiquitous enzyme RNase H, which
CC selectively cleaves the RNA of DNA-RNA heteroduplexes; and (ii) the
CC arrest of translation initiation caused by AS-ODN hybridization to the 5'
CC un-translated region or the translation initiation site on the mRNA.
CC Inhibition of phosphodiesterase (PDE) enzyme expression results in
CC elevated levels of cAMP in the cells due to PDE1B1 being involved in the
CC metabolism of cAMP. The elevated cAMP levels result in apoptosis by
CC inhibition of DNA synthesis. The method and AS-ODN are useful in inducing
CC cAMP stimulated apoptosis and in the treatment of immunoproliferative
CC disorders and immune disfunctions such as acute lympholytic leukemia,
CC breast and prostate cancer
XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        122 GTACGGCATGCTGGCCC 138
              ||| |||| | ||||||
Db          1 GTATGGCAGGATGGCCC 17
```

RESULT 837
AAX86200/c
ID AAX86200 standard; DNA; 18 BP.
XX
AC AAX86200;
XX
DT 22-SEP-1999 (first entry)
XX
DE PCR primer used to amplify the PIG3 gene.
XX
KW p53 transcription tag; p53 status; cancer; cytotoxicity; carcinogenicity;
KW neoplastic; p53 binding site; PIG-3 promoter; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9914356-A2.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019300.
XX
PR 17-SEP-1997; 97US-0059153P.
PR 30-MAR-1998; 98US-0079817P.
XX
PA (UYJO) UNIV JOHNS HOPKINS.
XX
PI Vogelstein B, Kinzler KW, Polyak K;
XX
DR WPI; 1999-443793/37.
XX
PT Use of p53 transcription tags to determine p53 status in, e.g. cancer
PT diagnosis.
XX
PS Disclosure; Page 14; 73pp; English.
XX
CC The specification describes the use of p53 transcription tags for
CC developing products to determine p53 status, to diagnose cancer and to
CC evaluate cytotoxicity or carcinogenicity of a test agent. A method for
CC diagnosing cancer or determining p53 status in a sample suspected for
CC being neoplastic comprises comparing the level of transcription of an RNA
CC transcript in a first sample (s1) of a first tissue (t1) to the level of
CC transcription of the transcript in a second sample (s2) of a second
CC tissue (s2), where s1 is suspected of being neoplastic and s2 is a normal
CC human tissue (of the same type) and the transcript is identified by a tag
CC ; and categorizing s1 as neoplastic or as having a mutant p53 when
CC transcription is found to be the same or lower in the first, than in s2.
CC The methods and products can be used to determine p53 status, to diagnose
CC cancer and to evaluate cytotoxicity or carcinogenicity of a test agent.
CC PCR primers AAX86199-200 were used to amplify the PIG3 gene, in the
CC course of the invention
XX
SQ Sequence 18 BP; 1 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        328 CGGCGGACGACCAGGGC 344
              | ||||  |||||||||
Db         17 CCGCGGCAGACCAGGGC 1
```

RESULT 838
AAX38073/c
ID AAX38073 standard; DNA; 18 BP.
XX
AC AAX38073;
XX
DT 04-JUN-1999 (first entry)
XX
DE HLA-A specific exon region primer SEQ ID NO:229.
XX
KW Human; histocompatibility locus antigen; HLA; determination; allele;
KW HLA-B typing; PCR; HLA class I; cis/trans linkage resolution; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9907883-A1.
XX
PD 18-FEB-1999.
XX
PF 11-AUG-1998; 98WO-CA000768.
XX
PR 11-AUG-1997; 97US-00909290.
XX
PA (VISI-) VISIBLE GENETICS INC.
PA (BLAS/) BLASCZYK R H.
XX
PI Blasczyk RH, Leushner J;
XX
DR WPI; 1999-167446/14.
XX
PT Determination of HLA class I group type of a subject - using group
PT specific untranslated region primer pair.
XX
PS Example; Page 21; 195pp; English.
XX
CC The present invention describes a method using novel primers involving
CC the PCR-based determination of histocompatibility locus antigen B (HLA-B)
CC Class I group type. Determining the HLA-B Class I group type of a subject
CC comprises: (i) combining a group-specific untranslated region primer pair
CC with a target DNA sample from the subject under conditions such that
CC primer-based amplification of the target DNA may occur; and (ii)

```
CC   determining whether a nucleic acid product is produced by the
CC   amplification; where the ability of the primer pair to produce a nucleic
CC   acid product is associated with a particular HLA group type. The method
CC   can be used for HLA-B typing. In the method, the initial group specific
CC   amplification allows a PCR based separation of haplotypes in 95% of
CC   patient samples. It permits the resolution of cis/trans linkages of
CC   heterozygote sequencing results which cannot be achieved with other
CC   protocols. AAX37845 to AAX38286 represent DNA sequence used in the
CC   exemplification of the present invention
XX
SQ   Sequence 18 BP; 1 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        214 AGAACTCGGTGGCGGCC 230
              | |||| || |||||||
Db         18 ACAACTGGGAGGCGGCC 2


RESULT 839
AAA55505
ID   AAA55505 standard; DNA; 18 BP.
XX
AC   AAA55505;
XX
DT   30-AUG-2000  (first entry)
XX
DE   TRAF1 antisense oligonucleotide ISIS# 26707.
XX
KW   Tumour necrosis factor receptor-associated factor; TRAF; human;
KW   antisense oligonucleotide; phosphorothioate; antiproliferative;
KW   anti-inflammatory; E-selectin; jun kinase; ss.
XX
OS   Synthetic.
XX
PN   WO200020435-A1.
XX
PD   13-APR-2000.
XX
PF   05-OCT-1999;   99WO-US023171.
XX
PR   06-OCT-1998;   98US-00167109.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Cowsert LM,  Monia BP,  Xu XS;
XX
DR   WPI; 2000-303732/26.
XX
PT   Antisense oligonucleotides targeted to nucleic acids encoding human tumor
PT   necrosis factor receptor-associated factor (TRAF), useful for treating
PT   diseases associated with TRAF expression such as inflammatory diseases.
XX
PS   Example 14; Page 46; 170pp; English.
XX
CC   The present invention relates to antisense oligonucleotides (see AAA55496
CC   -AA55757) which are targeted to nucleic acids encoding a human tumour
CC   necrosis factor receptor-associated factor (TRAF). The antisense
CC   sequences comprise at least one modified internucleotide linkage, which
CC   is a phosphorothioate linkage. The oligonucleotides also include at least
CC   one modified sugar moiety such as a 2'-O-methoxyethyl sugar moiety.
CC   Sequences AAA55490-A55495 represent nucleotide sequences encoding human
CC   TRAF1-6. Included in the invention is a method for treating a human
CC   having a disease associated with the expression of TRAF comprising
CC   administering an antisense oligonucleotide. The reduction of jun kinase
CC   activation in cells comprises contacting the cells with an antisense
CC   oligonucleotide targeted to TRAF-6. A method for the reduction of E-
CC   selectin expression in cells or tissues comprises contacting the cells or
CC   tissues with an antisense oligonucleotide targeted to TRAF-2 or TRAF-6.
CC   The antisense oligonucleotides have antiproliferative and anti-
CC   inflammatory activity and are useful for treating disorders associated
CC   with cell proliferation and inflammation. The antisense oligonucleotides
CC   may also be used as a diagnostic probe for studying gene function
XX
SQ   Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        239 AGGCTGCTTCCCGGGCT 255
              || | |||||| |||||
Db          1 AGACGGCTTCCTGGGCT 17


RESULT 840
AAZ48548/c
ID   AAZ48548 standard; DNA; 18 BP.
XX
AC   AAZ48548;
XX
DT   31-MAR-2000  (first entry)
XX
DE   Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18941.
XX
KW   Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
KW   inflammation; tumour formation; TNFR1; anticancer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US6007995-A.
XX
PD   28-DEC-1999.
XX
PF   26-JUN-1998;   98US-00106038.
XX
PR   26-JUN-1998;   98US-00106038.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Cowsert LM;
XX
DR   WPI; 2000-105333/09.
XX
PT   Antisense inhibition of tumor necrosis factor type 1 expression for
PT   diagnosis, treatment and prevention of disease, particularly tumors.
XX
PS   Claim 1; Col 25; 34pp; English.
XX
CC   The invention provides antisense compounds targeted to human tumour
CC   necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
CC   can be used in a method of inhibiting the expression of TNFR1 human cells
CC   or tissues. The antisense compounds specifically hybridize with one or
CC   more nucleic acids encoding TNFR1 modulating the function of nucleic acid
CC   molecules encoding TNFR1, ultimately modulating the amount of TNFR1
CC   produced. The antisense compounds and method are useful as research
CC   reagents and diagnostics, and in the treatment and prophylaxis of
CC   infection, inflammation or tumour formation. Sequences AAZ48482-565
CC   represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX
SQ   Sequence 18 BP; 3 A; 9 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        131 GCTGGCCCGCCTGGCGG 147
              ||||| | |||||| ||
Db         18 GCTGGGCTGCCTGGAGG 2


RESULT 841
AAZ39609
```

```
ID   AAZ39609 standard; DNA; 18 BP.
XX
AC   AAZ39609;
XX
DT   28-FEB-2000  (first entry)
XX
DE   Human cREL mRNA inhibiting antisense oligo ISIS #24093.
XX
KW   Human; cREL; transcriptional activator; antisense compound; therapeutic;
KW   ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US6001652-A.
XX
PD   14-DEC-1999.
XX
PF   18-SEP-1998;   98US-00156253.
XX
PR   18-SEP-1998;   98US-00156253.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM,  Baker BF;
XX
DR   WPI; 2000-061889/05.
XX
PT   Antisense modulation of human cREL expression.
XX
PS   Example 15; Col 27; 26pp; English.
XX
CC   The invention provides antisense compounds targeted to a coding region,
CC   3'UTR or 5'UTR of a nucleic acid molecule encoding human cREL
CC   (transcriptional activator). The antisense compounds are useful as
CC   research agents and diagnostics such as in the elucidation of the
CC   function of a particular gene. The antisense compounds can be useful as
CC   therapeutic modalities that can be configured to be useful in treatment
CC   regimes for treatment of cells, tissues and animals, especially humans.
CC   In the prior art, there are no known therapeutic agents which effectively
CC   inhibit the synthesis of cREL and additional agents capable of inhibiting
CC   cREL function are still required. Sequences AAZ39588-627 represent
CC   antisense phosphorothioate oligodeoxynucleotides inhibiting human cREL
CC   mRNA
XX
SQ   Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        405 TTCTACGTGATCGAGAC 421
              ||||||||||| | |
Db          2 TTCTACGTGATCCTGGC 18


RESULT 842
AAZ69838/c
ID   AAZ69838 standard; DNA; 18 BP.
XX
AC   AAZ69838;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Human biallelic marker upstream amplification primer SEQ ID NO:4194.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW   haplotyping; hybridisation; identification; characterisation;
KW   amplification; single nucleotide polymorphism; SNP; PCR primer;
KW   diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954500-A2.
XX
PD   28-OCT-1999.
XX
PF   21-APR-1999;   99WO-IB000822.
XX
PR   21-APR-1998;   98US-0082614P.
PR   23-NOV-1998;   98US-0109732P.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I;
XX
DR   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome.
XX
PS   Claim 8; Page 1125; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC   primers for the biallelic markers. The biallelic markers of the invention
CC   have a variety of uses: they can be used for high density mapping of the
CC   human genome, and in complex association studies and haplotyping studies
CC   which are useful in determining the genetic basis for disease states.
CC   Compositions and methods of the invention can also be useful for the
CC   identification of the targets for the development of pharmaceutical
CC   agents and diagnostic methods, as well as the characterisation of the
CC   differential efficacious responses to and side effects from
CC   pharmaceutical agents acting on a disease as well as other treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC   3367, are not actually given a sequence in the Sequence Listing from the
CC   present invention
XX
SQ   Sequence 18 BP; 2 A; 3 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         45 GGCCACCACTCAGAGGA 61
              | |||||||| |||| |
Db         18 GACCACCACTTAGAGAA 2


RESULT 843
AAC78898/c
ID   AAC78898 standard; DNA; 18 BP.
XX
AC   AAC78898;
XX
DT   08-FEB-2001  (first entry)
XX
DE   Human PRO298 forward PCR primer SEQ ID NO:519.
XX
KW   Human; secreted protein; transmembrane protein; PRO; EST; cytostatic;
KW   expressed sequence tag; detection; cancer; PCR primer; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200053756-A2.
XX
PD   14-SEP-2000.
XX
PF   18-FEB-2000; 2000WO-US004341.
XX
PR   08-MAR-1999;   99WO-US005028.
PR   12-MAR-1999;   99US-0123957P.
PR   29-MAR-1999;   99US-0126773P.
PR   21-APR-1999;   99US-0130232P.
```

PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-0134287P.
PR 23-JUN-1999; 99US-0141037P.
PR 26-JUL-1999; 99US-0145698P.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2000-611443/58.
XX
PT Novel PRO polypeptides and polynucleotides used in detection methods, to
PT target bioactive molecules to specific cells, and to modulate cellular
PT activities.
XX
PS Example 95; Page 317; 636pp; English.
XX
CC AAC78458 to AAC78599 represent polynucleotide and EST (expressed sequence
CC tag) sequences which encode secreted or transmembrane PRO polypeptides.
CC The PRO polynucleotides and polypeptides have cytostatic activity. The
CC polynucleotides and polypeptides can be used for detecting the presence
CC of PRO polypeptides in samples, for linking bioactive molecules to cells
CC and for modulating biological activities of cells, using the polypeptides
CC for specific targeting. The polypeptide targeting can be used to kill the
CC target cells, e.g. for the treatment of cancers. The polypeptide pairs
CC provide specific targeting of bioactive molecules to cells. AAC78600 to
CC AAC78987 represent PCR primers and probes used in the isolation of the
CC PRO polynucleotide sequences
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
||||| || |||| |||
Db 17 GGAGGTCGACTTCCACT 1

RESULT 844
AAA53953
ID AAA53953 standard; DNA; 18 BP.
XX
AC AAA53953;
XX
DT 03-JAN-2001 (first entry)
XX
DE Universal primer used in differentiation/identification method.
XX
KW Identification; prokaryote; polymerase chain reaction; PCR;
KW amplification; primer; differential display; picric acid degredation;
KW gene cluster; open reading frame; ORF; dehydratase; dehydrogenase;
KW transcription factor; Acyl-CoA synthase; NADPH oxidoreductase; ss.
XX
OS Synthetic.
XX
PN WO200049177-A2.
XX
PD 24-AUG-2000.
XX
PF 17-FEB-2000; 2000WO-US003989.
XX
PR 19-FEB-1999; 99US-0120702P.
XX
PA (DUPO) DU PONT DE NEMOURS & CO E I.
XX
PI Rouviere P;
XX
DR WPI; 2000-587069/55.
XX
PT Differential display method using a large number of arbitrary primers for
PT RT-PCR used to isolate novel differentially expressed prokaryotic genes.
XX
PS Disclosure; Page 61; 66pp; English.
XX
CC A new method to identify differentially expressed prokaryotic genes using
CC a large number of arbitrarily primed polymerase chain reactions comprises
CC separating two populations of microbial cells, where a first population
CC is contacted with a stimulating agent; extracting total RNA from both
CC microbial cell populations; amplifying the extracted RNA from both
CC populations by preparing a collection of at least thirty-two different
CC arbitrary primers, where each primer comprises a common and a variable
CC region; individually contacting each primer of with a sample of extracted
CC RNA from the two populations under conditions where two sets of
CC amplification products are produced; purifying the two sets of
CC amplification products; identifying the amplification products generated
CC in the first population which differ from products generated from the
CC second population as differentially expressed genes; and optionally
CC sequencing the identified differentially expressed genes. The advantage
CC over previous methods is that previous methods of differential display to
CC clone genes using thirty-two or thirty primers have isolated four and one
CC genes, respectively. The new method using a greater number of primers has
CC isolated twenty-one induced gene fragments. This universal primer was
CC used for the reamplification of the differentially amplified bands
XX
SQ Sequence 18 BP; 5 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 178 AGTCCAAGGCACATATC 194
|||||| || ||||||
Db 1 AGTCCACGGAGCATATC 17

RESULT 845
AAF85457/c
ID AAF85457 standard; DNA; 18 BP.
XX
AC AAF85457;
XX
DT 23-JUL-2001 (first entry)
XX
DE Polynucleotide in unique region in exon 1 of rabbit motilin receptor.
XX
KW Motilin receptor; gastrointestinal disease; gastric motility disorder;
KW gastroparesis; irritable bowel syndrome; diarrhoea; ss.
XX
OS Oryctolagus cuniculus.
XX
PN WO200132710-A1.
XX
PD 10-MAY-2001.
XX
PF 25-OCT-2000; 2000WO-US029426.
XX
PR 29-OCT-1999; 99US-0162264P.
XX
PA (MERI) MERCK & CO INC.
XX

PI Tan C, Mckee K;
XX
DR WPI; 2001-343479/36.
XX
PT Novel polypeptides related to dog and rabbit motilin receptor
PT polypeptide, comprising unique regions from dog and motilin receptor
PT amino acid sequence, useful for identifying compounds for treating
PT diarrhea in humans.
XX
PS Claim 17; Page 22; 42pp; English.
XX
CC AAF85456-60 represent polynucleotide sequences from the unique region of
CC exon 1 of a rabbit motilin receptor gene. The specification describes an
CC unique sequence present in exon 1 of the motilin receptor, which is not
CC present in human or Sphaeroides nephelus 75E7 motilin receptor sequences.
CC The unique nucleic acid sequence is useful for measuring the ability of a
CC compound to affect motilin receptor activity. Motilin receptor
CC polynucleotides and polypeptides are used to identify therapeutic
CC compounds which are useful for treating gastrointestinal diseases and
CC disorders such as gastric motility disorders, gastroparesis, irritable
CC bowel syndrome, and diarrhoea
XX
SQ Sequence 18 BP; 1 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 373 TCCTGGACCGCGACGAC 389
||| || |||||| |||
Db 18 TCCGGGGCCGCGAAGAC 2

RESULT 846
AAF79645/c
ID AAF79645 standard; DNA; 18 BP.
XX
AC AAF79645;
XX
DT 29-MAY-2001 (first entry)
XX
DE Human Akt-3 antisense oligonucleotide, SEQ ID NO: 53.
XX
KW Human; Akt-3; protein kinase; cytostatic; antiinflammatory; infection;
KW antisense therapy; inflammation; tumour; ss.
XX
OS Homo sapiens.
XX
PN US6187586-B1.
XX
PD 13-FEB-2001.
XX
PF 29-DEC-1999; 99US-00474922.
XX
PR 29-DEC-1999; 99US-00474922.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Cowsert LM, Roth RA;
XX
DR WPI; 2001-264979/27.
XX
PT New antisense compounds targeting nucleic acids encoding human Akt-3
PT useful for treating a disease or condition associated with Akt-3
PT expression, or in preventing or delaying inflammation or tumor formation.
XX
PS Claim 1; Col 39; 37pp; English.
XX
CC The present sequence is one of a number of antisense compounds of up to
CC 30 nucleobases in length targeted to a nucleic acid encoding human Akt-3.
CC The antisense compounds are useful for inhibiting the expression of human
CC Akt-3 in human cells or tissues. They are also useful for modulating the
CC expression of Akt-3, and for treating a human or an animal suspected of
CC having, or being prone to, a disease or condition associated with Akt-3
CC expression. The antisense compounds may also be used as research
CC reagents, in kits and in diagnostics, e.g. to elucidate the function of a
CC particular gene or to distinguish between functions of various members of
CC a biological pathway; and as a prophylactic, e.g. to prevent or delay
CC infection, inflammation or tumour formation
XX
SQ Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 76 AGGGCCGCGCAGTGGAC 92
| ||||| ||||| |||
Db 18 ATGGCCGAGCAGTAGAC 2

RESULT 847
AAF82476/c
ID AAF82476 standard; DNA; 18 BP.
XX
AC AAF82476;
XX
DT 29-JUN-2001 (first entry)
XX
DE Rat P00188D09 RNA reverse PCR primer.
XX
KW Rat; secreted factor; P00210D09; P00188D09; cardiant; nephrotropic;
KW antiinflammatory; gene therapy; cardiac disease; renal disease;
KW inflammatory disease; PCR primer; ss.
XX
OS Rattus norvegicus.
XX
PN WO200123419-A2.
XX
PD 05-APR-2001.
XX
PF 27-SEP-2000; 2000WO-US026582.
XX
PR 27-SEP-1999; 99US-0156277P.
XX
PA (SCIO-) SCIOS INC.
XX
PI Stanton LW, Kapoun AM;
XX
DR WPI; 2001-328177/34.
XX
PT Novel secreted factor encoded by clone P00210D09 useful for diagnosing,
PT treating and/or preventing various cardiac, renal and inflammatory
PT diseases.
XX
PS Example 9; Page 51; 69pp; English.
XX
CC The present sequence was used to amplify rat P00188D09 RNA by
CC quantitative real-time PCR. The invention relates to a polypeptide
CC comprising a sequence of at least 80% identity to residues 22-122 of the
CC present sequence, or a sequence encoded by a nucleic acid hybridising
CC under stringent conditions to the complement of the coding region
CC comprising 1031 nucleotides, and having at least one biological activity
CC of the polypeptide encoded by rat clone P00210D09. The polypeptides and
CC polynucleotides of the invention are useful for the treatment of cardiac,
CC renal and inflammatory diseases. The P0021D09 polynucleotides are useful
CC in antisense mediated gene inhibition and in gene therapy. The
CC polypeptides are useful in assays for identifying lead compounds that may
CC be used as therapeutic agents in the treatment of cardiac, kidney or
CC inflammatory diseases
XX
SQ Sequence 18 BP; 3 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy         16 TGCGGGTGACCGAGGGC 32
              ||| ||||| ||| |||
Db         17 TGCAGGTGATCGACGGC 1
```

RESULT 848
AAH40381
ID AAH40381 standard; DNA; 18 BP.
XX
AC AAH40381;
XX
DT 14-AUG-2001 (first entry)
XX
DE SNP specific upper PCR primer SEQ ID 3177.
XX
KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200129262-A2.
XX
PD 26-APR-2001.
XX
PF 13-OCT-2000; 2000WO-US028436.
XX
PR 15-OCT-1999; 99US-0160096P.
XX
PA (ORCH-) ORCHID BIOSCIENCES INC.
XX
PI Picoult-Newburg L, Pohl M;
XX
DR WPI; 2001-290930/30.
XX
PT New genotyping oligonucleotide, useful for detecting the presence,
PT absence or identity of single polynucleotide polymorphism in a nucleic
PT acid sample.
XX
PS Claim 1; Page 66; 83pp; English.
XX
CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC primer extension (SNPE) primers, and the sequences of regions flanking
CC sites of single nucleotide polymorphisms SNPs. The present invention
CC includes kits for determining the presence or absence of a SNP, using the
CC oligonucleotides of the invention. The PCR primers are used to amplify a
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC The oligonucleotides are useful for genotyping a nucleic acid sample by
CC performing a single-nucleotide primer extension reaction. The
CC oligonucleotides are useful for determining the presence, absence or
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, nervous system diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a PCR primer specific
CC for a human SNP containing DNA sequence
XX
SQ Sequence 18 BP; 4 A; 4 C; 9 G; 1 T; 0 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        140 CCTGGCGGTGGAGGCCG 156
              || || |||| ||||||
Db          2 CCGGGAGGTGAAGGCCG 18
```

RESULT 849
ABZ72355/c
ID ABZ72355 standard; DNA; 18 BP.
XX
AC ABZ72355;
XX
DT 03-APR-2003 (first entry)
XX
DE Gene 216 polymorphism genotyping ASO primer SEQ ID NO 327.
XX
KW Human; Gene 216; chromosome 20p13-p12; antiasthmatic; anorectic;
KW antiinflammatory; gastrointestinal; gene therapy; vaccine; asthma;
KW obesity; inflammatory bowel disease; primer; ss.
XX
OS Synthetic.
XX
PN WO200178894-A2.
XX
PD 25-OCT-2001.
XX
PF 13-APR-2001; 2001WO-US012245.
XX
PR 13-APR-2000; 2000US-00548797.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
XX
PI Keith T;
XX
DR WPI; 2001-639428/73.
XX
PT Isolated genes (Gene 216) from human chromosome 20p13-p12 and the
PT proteins they encode, useful for the prevention, diagnosis and treatment
PT of asthma, obesity and inflammatory bowel disease.
XX
PS Example 11; Page 156; 520pp; English.
XX
CC The invention relates to isolated genes (Gene 216) from human chromosome
CC 20p13-p12 and the proteins they encode. The nucleic acids and proteins
CC may be used in the prevention, diagnosis and treatment of diseases
CC associated with inappropriate Gene 216 expression. For example, the
CC nucleic acids (or vectors) and proteins may be used to treat disorders
CC associated with decreased expression by rectifying mutations or deletions
CC in a patient's genome that affect the activity of gene 216 by expressing
CC inactive proteins or to supplement the patients own production of Gene
CC 216 proteins. Additionally, the nucleic acids may be used to produce the
CC secreted Gene 216 protein, by inserting the nucleic acids into a host
CC cell and culturing the cell to express the protein. The nucleic acids and
CC complementary sequences may also be used as DNA probes in diagnostic
CC assays to detect and quantitate the presence of similar nucleic acid
CC sequences in samples and therefore which patients may be in need of
CC restorative therapy. The Gene 216 protein may also be used as antigens in
CC the production of antibodies against Gene 216 and in assays to identify
CC modulators of Gene 216 expression and activity. The anti-Gene 216
CC antibodies and antagonists may also be used to down regulate expression
CC and activity. The anti-Gene 216 antibodies may also be used as diagnostic
CC agents for detecting the presence of Gene 216 proteins in samples (e.g.
CC by enzyme linked immunosorbant assay or ELISA). Disorders that may be
CC prevented, diagnosed and/or treated by the above methods include, for
CC example asthma, obesity and inflammatory bowel disease. The present
CC sequence is that of a Gene 216 related primer used in examples of the
CC invention. The primers are used in the physical mapping of the gene
CC (ABZ72067-ABZ72088), polymorphism identifiction using single strand
CC conformational polymorphism (SSCP) analysis (ABZ72091-ABZ72184),
CC sequencing (ABZ72185-ABZ72268) and genotyping (ABZ72317-ABZ72362)
XX
SQ Sequence 18 BP; 1 A; 3 C; 9 G; 5 T; 0 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         92 CATCACCACGTCTGACC 108
              || ||||||  ||||||
Db         17 CAGCACCACAGCTGACC 1


RESULT 850
ABA82276/c
ID   ABA82276 standard; DNA; 18 BP.
XX
AC   ABA82276;
XX
DT   25-JAN-2002  (first entry)
XX
DE   Zmax1 gene region physical map preparation STS marker #235.
XX
KW   Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3;
KW   sequence tagged site; STS; osteoporosis; osteopathic; gene therapy;
KW   antisense therapy; vaccine; bone disorder; Paget's disease; adapter;
KW   sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200177327-A1.
XX
PD   18-OCT-2001.
XX
PF   21-JUN-2000; 2000WO-US016951.
XX
PR   05-APR-2000; 2000US-00543771.
PR   05-APR-2000; 2000US-00544398.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Carulli JP,  Little RD,  Recker RR,  Johnson ML;
XX
DR   WPI; 2001-657171/75.
XX
PT   New high bone mass (HBM) and Zmax1 genes and proteins useful for
PT   modulating bone mass for the treatment of e.g. osteoporosis.
XX
PS   Disclosure; Page 34; 443pp; English.
XX
CC   The present invention describes the human Zmax1 gene and the high bone
CC   mass (HBM) gene,which are found on chromosome 11q13.3. The Zmax1 and HBM
CC   genes have osteopathic activities. The genes can be used in gene therapy,
CC   antisense therapy and in the production of vaccines. They can be used in
CC   the diagnosis and treatment of bone disorders including osteoporosis,
CC   Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.
CC   ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
CC   the exemplification of the present invention
XX
SQ   Sequence 18 BP; 3 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GGCCAGGAGTGAAACTG 17
              || |||||||||  |||
Db         18 GGGCAGGAGTGACTCTG 2


RESULT 851
AAS20963/c
ID   AAS20963 standard; DNA; 18 BP.
XX
AC   AAS20963;
XX
DT   09-APR-2002  (first entry)
XX
DE   PCR primer Igf2r-I2 relating to gene imprinting invention.
XX
KW   Human; genomic imprinting; pluripotent mouse embryonic germ cell line;
KW   EG; methylated CpG island; DNA methylation; gene imprinting;
KW   post-translational modification of histone; cancer; birth defect;
KW   diabetes; aberrant imprinting; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200190313-A2.
XX
PD   29-NOV-2001.
XX
PF   22-MAY-2001; 2001WO-US016253.
XX
PR   22-MAY-2000; 2000US-0206158P.
PR   22-MAY-2000; 2000US-0206161P.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Feinberg A,  Strichman-Almashanu L,  Jiang S;
XX
DR   WPI; 2002-083100/11.
XX
PT   Forming embryonic germ cells useful as model system to study imprinting
PT   involves mating genetically divergent male and female mammal of same
PT   species, dissecting and dissociating embryo obtained from pregnant
PT   mammal.
XX
PS   Disclosure; Page 54; 125pp; English.
XX
CC   The present invention relates to a model system for genomic imprinting
CC   using pluripotent mouse embryonic germ (EG) cell lines derived from an
CC   interspecific cross. Also disclosed is a library containing methylated
CC   CpG islands and a method for assaying methylation in one or more
CC   imprintable genes. The gene imprinting assay is carried out by single-
CC   strand conformation polymorphism (SSCP), quantitative sequencing, single
CC   nucleotide primer extension or hot stop PCR. The assays are carried out
CC   to determine the post-translational modification of histones. The method
CC   further involves identifying a test substance as a candidate drug for
CC   treating cancer if the test substance enhances imprinting of a gene whose
CC   imprinting is lost in cancer, or if the test substance inhibits
CC   imprinting of a gene whose imprinting is gained in cancer. The methylated
CC   CpG islands are useful for providing an assessment of the risk of
CC   developing cancer, or for providing diagnostic information relative to
CC   cancer which involves determining the methylation status of the CpG
CC   island in a patient's DNA. The EG cells allow the accession of imprinted
CC   genes which are useful for detecting birth defects, diabetes and cancers
CC   associated with aberrant imprinting. The EG cell lines represent the
CC   first in vitro model system in which genomic imprinting can be followed
CC   dynamically and the two alleles can be distinguished. AAS20953-AAS20969
CC   represent PCR primers described in the present invention
XX
SQ   Sequence 18 BP; 1 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         75 GAGGGCCGCGCAGTGGA 91
              || |||| ||||| |||
Db         18 GATGGCCCCGCAGAGGA 2


RESULT 852
ABT05044/c
ID   ABT05044 standard; DNA; 18 BP.
XX
AC   ABT05044;
XX
```

DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 74.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsert LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS Example 10; Page 45; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 3 A; 9 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 131 GCTGGCCCGCCTGGCGG 147
||||| | |||||| ||
Db 18 GCTGGGCTGCCTGGAGG 2

RESULT 853
ABT05119
ID ABT05119 standard; DNA; 18 BP.
XX
AC ABT05119;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 149.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW human; ds.
XX
OS Homo sapiens.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsert LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS Example 18; Page 56; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in
CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a human oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 18 BP; 4 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 141 CTGGCGGTGGAGGCCGG 157
|||| |||| ||| |||
Db 1 CTGGAGGTGAAGGACGG 17

RESULT 854
AAL43633
ID AAL43633 standard; DNA; 18 BP.
XX
AC AAL43633;
XX
DT 05-SEP-2002 (first entry)
XX
DE Rhodococcus picric acid degradation pathway-related universal PCR primer.
XX
KW Picric acid degradation gene cluster; ss; recombinant organism;
KW picric acid degradation pathway; PCR; primer.
XX
OS Unidentified.
XX
PN US2002042117-A1.
XX
PD 11-APR-2002.
XX
PF 17-SEP-2001; 2001US-00955597.
XX
PR 03-SEP-1999; 99US-0152545P.
PR 31-AUG-2000; 2000US-00651941.
XX
PA (ROUV/) ROUVIERE P E.
PA (WALT/) WALTERS D M.
PA (RUSS/) RUSS R.
XX
PI Rouviere PE, Walters DM, Russ R;
XX
DR WPI; 2002-381946/41.
XX

PT Isolated nucleic acid fragments encoding enzymes of the picric acid
PT degradation pathway isolated from Rhodococcus erythropolis HL PM-1,
PT useful in the creation of recombinant organisms that have the ability to
PT degrade picric acid.
XX
PS Example 5; Page 15; 53pp; English.
XX
CC The invention comprises 12 Rhodococcus erythropolis ORFs encoding enzymes
CC of the picric acid degradation pathway. The invention also comprises the
CC nucleotide sequence of the picric acid degradation gene cluster
CC containing all 12 of the ORFs. The picric acid degradation pathway genes
CC and enzymes of the invention are useful for creating recombinant
CC organisms that have the ability to degrade picric acid. As well as for
CC the identification of new species of bacteria that have the ability to
CC degrade picric acid. The present DNA sequence represents a Rhodococcus
CC picric acid degradation pathway-related universal reamplification PCR
CC primer
XX
SQ Sequence 18 BP; 5 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        178 AGTCCAAGGCACATATC 194
              |||||| ||  ||||||
Db          1 AGTCCACGGAGCATATC 17
```

RESULT 855
ABK51851
ID ABK51851 standard; DNA; 18 BP.
XX
AC ABK51851;
XX
DT 13-AUG-2002 (first entry)
XX
DE R. erythropolis picric acid degradation related universal PCR primer.
XX
KW Picric acid degradation; 2,4,6-trinitrophenol; explosive manufacturing;
KW aniline; colour fast dye; pharmaceutical; steel etching; PCR;
KW environmental toxicant; enzymatic degradative process; primer; ss.
XX
OS Synthetic.
XX
PN US6355470-B1.
XX
PD 12-MAR-2002.
XX
PF 31-AUG-2000; 2000US-00651941.
XX
PR 03-SEP-1999; 99US-0152545P.
XX
PA (DUPO) DU PONT DE NEMOURS & CO E I.
XX
PI Rouviere PE, Walters DM, Russ R;
XX
DR WPI; 2002-433274/46.
XX
PT Nucleic acid encoding an F420/NADPH oxidoreductase isolated from
PT Rhodococcus erythropolis HL PM-1 is associated with picric acid
PT degradation and is useful to create recombinant organisms that degrade.
XX
PS Example 5; Col 26; 49pp; English.
XX
CC The present invention relates to the isolation of Rhodococcus
CC erythropolis HL PM-1 gene cluster containing 12 open reading frames
CC (ORFs) implicated in the degradation of picric acid (2,4,6-
CC trinitrophenol). The polynucleotide sequences of the invention are useful
CC for creating recombinant organisms that have the ability to degrade
CC picric acid. Picric acid which is used in industrial applications
CC including the manufacture of explosives, aniline, colour fast dyes,
CC pharmaceuticals and in steel etching, is highly unstable. The present
CC invention provides a means of disposal/removal of this toxic substance
CC from the environment by an enzymatic degradative process. The present
CC sequence represents a universal PCR primer used in the examples of the
CC present invention
XX
SQ Sequence 18 BP; 5 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        178 AGTCCAAGGCACATATC 194
              |||||| ||  ||||||
Db          1 AGTCCACGGAGCATATC 17
```

RESULT 856
ABK23073/c
ID ABK23073 standard; DNA; 18 BP.
XX
AC ABK23073;
XX
DT 09-APR-2002 (first entry)
XX
DE Human Zmax1 cDNA forward PCR primer #118.
XX
KW Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke;
KW lipid-associated condition; arteriosclerosis; cardiovascular disease; ss;
KW osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up;
KW neurovascular condition; wound healing; gene therapy; PCR primer; probe;
KW bone development disorder; antiarteriosclerotic; cardiovascular;
KW osteopathic; cerebroprotective.
XX
OS Homo sapiens.
XX
PN WO200192891-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016946.
XX
PR 26-MAY-2000; 2000US-00578900.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
PA (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
XX
PI Carulli JP, Little RD, Recker RR, Johnson ML;
XX
DR WPI; 2002-097784/13.
XX
PT Identifying molecules involved in lipid regulation, useful for
PT diagnosing, treating or preventing e.g., arteriosclerosis, comprises
PT identifying a molecule that binds to high bone mass gene or its
PT corresponding wild type gene.
XX
PS Disclosure; Page 39; 409pp; English.
XX
CC The invention relates to a method for identifying a molecule involved in
CC lipid regulation comprising identifying a molecule that binds to or
CC inhibits binding of a molecule to high bone mass (HBM) or its wild type
CC gene, Zmax1. Compounds identified by the method are useful for treating,
CC diagnosing, preventing or screening for normal and abnormal lipid-
CC associated conditions, including arteriosclerosis, cardiovascular
CC disease, stroke, and osteoporosis. The compounds may also be used in the
CC treatment or prevention of diabetic atherosclerosis, neurovascular
CC conditions caused by plaque build-up, poor circulation due to plaque
CC build-up and associated poor wound healing. The methods may be used in
CC gene therapy, pharmaceutical development, and diagnostic assays for bone
CC development disorders. Molecules identified by comparison of Zmax1 and
CC HBM systems can be used as surrogate markers in pharmaceutical
CC development, in diagnosis of human or animal bone disease, and in the
CC treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA
CC molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers

```
CC   and adapters of the invention
XX
SQ   Sequence 18 BP; 3 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GGCCAGGAGTGAAACTG 17
              || |||||||||  |||
Db         18 GGGCAGGAGTGACTCTG 2


RESULT 857
ABL30698
ID   ABL30698 standard; DNA; 18 BP.
XX
AC   ABL30698;
XX
DT   21-MAR-2002  (first entry)
XX
DE   Human HLA genotyping oligonucleotide SEQ ID NO 187.
XX
KW   Human; human leukocyte antigen; HLA; genotype; polymorphism;
KW   immunogenetic; transplantation; genetic disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192572-A1.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-JP004662.
XX
PR   01-JUN-2000; 2000JP-00164798.
XX
PA   (NISN ) NISSHINBO IND INC.
PA   (SYST-) SYSTEM RES INC.
XX
PI   Inoko H,  Kagiya T,  Ichihara T,  Matsumura Y,  Moriya S,  Nishida M;
XX
DR   WPI; 2002-122074/16.
XX
PT   Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
PT   individuals e.g. by determining immunogenetic differences when
PT   transplanting between them.
XX
PS   Claim 10; Page 128; 345pp; Japanese.
XX
CC   The invention relates to a typing kit for judging human leukocyte antigen
CC   (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC   oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC   genes e.g. belonging to HLA class I antigens on human genome and
CC   containing gene polymorphisms as alloantigens have been immobilised as
CC   primers for amplification of cleaved nucleic acids relating to gene
CC   polymorphisms. The method is useful for judging HLA genotypes of
CC   individuals by determining immunogenetic differences before transplanting
CC   between them, providing genetic information to decide compatibility of
CC   organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC   pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC   diagnosis of genetic diseases and identifying individuals
XX
SQ   Sequence 18 BP; 4 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         56 AGAGGAGTCTCTGCACT 72
              |||||||||  ||| ||
Db          2 AGAGGAGTCCGTGCGCT 18


RESULT 858
AAD38945
ID   AAD38945 standard; DNA; 18 BP.
XX
AC   AAD38945;
XX
DT   23-SEP-2002  (first entry)
XX
DE   Human Her-2 antisense oligonucleotide, ISIS #27972.
XX
KW   Human; Her-2; epidermal growth factor receptor 2; infection; cancer;
KW   hyperproliferative disorder; prophylaxis; inflammation; antisense;
KW   tumour; gene therapy; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .18
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
FT   modified_base    1. .4
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    1
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    7
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    12
FT                    /*tag=  f
FT                    /mod_base= m5c
FT   modified_base    15. .18
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO200222636-A1.
XX
PD   21-MAR-2002.
XX
PF   12-SEP-2001; 2001WO-US028572.
XX
PR   15-SEP-2000; 2000US-00663834.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Cowsert LM;
XX
DR   WPI; 2002-471192/50.
XX
PT   Novel antisense oligonucleotide which modulates the expression of Human
PT   Epidermal Growth Factor receptor, Her2, is useful for treating tumors
PT   inflammation or to prevent infection in humans.
XX
PS   Claim 1; Page 89; 116pp; English.
XX
CC   The invention relates to antisense compounds targetted to a nucleic acid
CC   molecule encoding Her2 (human Epidermal Growth Factor receptor 2) that
CC   specifically hybridises with and inhibits the expression of Her2.
CC   Antisense compounds of the invention are used for treating diseases or
CC   conditions associated with Her2 such as hyperproliferative disorders e.g.
CC   lung, breast, gastric, oesophageal, colon, bladder, salivary, neural or
CC   cardiac cancer. They are also useful prophylactically e.g. to prevent or
CC   delay infection, inflammation and tumour formation. The invention is also
CC   used in gene therapy. The present sequence is an antisense
CC   oligonucleotide targetted to human Her-2
XX
SQ   Sequence 18 BP; 4 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
```

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         26 CGAGGGCTGGGACGAAG 42
              ||| |||||||  ||||
Db          1 CGAAGGCTGGGCTGAAG 17
```

RESULT 859
AAD27252
ID AAD27252 standard; DNA; 18 BP.
XX
AC AAD27252;
XX
DT 09-APR-2002 (first entry)
XX
DE Primer used in the exemplification of the invention.
XX
KW Picric acid degradation gene; cyclohexanol degradation; heavy metal;
KW inhibitory effect; chemical; environmental pollutant; anaerobiosis;
KW oxidative damage; pathogenesis; primer; ss.
XX
OS Unidentified.
XX
PN US6329151-B1.
XX
PD 11-DEC-2001.
XX
PF 05-SEP-2000; 2000US-00655270.
XX
PR 03-SEP-1999; 99US-0152542P.
XX
PA (DUPO) DU PONT DE NEMOURS & CO E I.
XX
PI Rouviere PE;
XX
DR WPI; 2002-121127/16.
XX
PT Identifying differentially expressed genes, by amplifying total RNA of
PT first microbial cell population that is contacted with stimulating agent
PT and of a second population using arbitrary primers, and comparing them.
XX
PS Example 5; Col 5; 51pp; English.
XX
CC The invention relates to a reliable and rapid method to identify
CC differentially expressed genes in microbes. The method relies on the use
CC of a large number of arbitrarily primed PCR reactions. The method is
CC useful for identifying differentially expressed genes in microbes, and
CC for distinguishing genetic differences between two populations of cells
CC which differ in genotype. This method is useful for identifying the DNA
CC sequences of genes involved in the degradation of the picric acid from
CC Rhodococcus erythropolis strain HL PM-1, and genes involved in
CC cyclohexanol degradation from a consortium of organisms, or to detect
CC cDNA fragments from differentially expressed mRNAs. This method is useful
CC for examining the inhibitory effects of various treatments such as
CC chemicals, environmental pollutants, heavy metals, changes in
CC temperature, changes in pH, agents producing oxidative damage, agents
CC producing DNA damage, anaerobiosis, pathogenesis, and changes in nitrate
CC availability on mRNA levels. The present sequence is an universal
CC reamplification primer used in the exemplification of the invention
XX
SQ Sequence 18 BP; 5 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        178 AGTCCAAGGCACATATC 194
              ||||||  ||  ||||||
Db          1 AGTCCACGGAGCATATC 17
```

RESULT 860
ABT11916
ID ABT11916 standard; DNA; 18 BP.
XX
AC ABT11916;
XX
DT 19-DEC-2002 (first entry)
XX
DE Neublastin DNA related PCR primer.
XX
KW Nootropic; neuroprotective; antiparkinsonian; anticonvulsant; analgesic;
KW tranquiliser; antidiabetic; ophthalmological; neurodegenerative disorder;
KW neublastin; ischemic neuronal damage; traumatic brain injury; diabetes;
KW peripheral neuropathy; neuropathic pain; Alzheimer's disease; glaucoma;
KW Huntington's disease; Parkinson's disease; amyotrophic lateral sclerosis;
KW memory impairment; renal disease; PCR; primer; ss.
XX
OS Unidentified.
XX
PN WO200272826-A2.
XX
PD 19-SEP-2002.
XX
PF 12-MAR-2002; 2002WO-EP002691.
XX
PR 12-MAR-2001; 2001US-00804615.
XX
PA (BIOJ) BIOGEN INC.
PA (NSGE-) NS GENE AS.
XX
PI Sah DWY, Johansen TE, Rossomando A;
XX
DR WPI; 2002-713515/77.
XX
PT New truncated neublastin polypeptides lacking one or more amino-terminal
PT amino acids of a mature neublastin polypeptide useful for treating
PT neurodegenerative disorders, e.g. peripheral neuropathy, neuropathic
PT pain, brain injury.
XX
PS Disclosure; Fig 8; 138pp; English.
XX
CC The invention relates to a truncated neublastin polypeptide comprising an
CC amino acid terminus that lacks one or more amino-terminal amino acids of
CC a mature neublastin polypeptide. The polypeptides and nucleic acids are
CC useful for treating neurodegenerative disorders such as ischemic neuronal
CC damage, traumatic brain injury, peripheral neuropathy, neuropathic pain,
CC Alzheimer's disease, Huntington's disease, Parkinson's disease,
CC amyotrophic lateral sclerosis, memory impairment, diabetes, renal
CC diseases, or glaucoma by moderating metabolism, growth, differentiation
CC or survival of a nerve or neuronal cell. This polynucleotide sequence is
CC a neublastin PCR primer of the invention
XX
SQ Sequence 18 BP; 1 A; 6 C; 9 G; 2 T; 0 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        131 GCTGGCCCGCCTGGCGG 147
              |||||||||  |||  ||
Db          1 GCTGGCCCGGCTGCAGG 17
```

RESULT 861
ACD42854/c
ID ACD42854 standard; DNA; 18 BP.
XX
AC ACD42854;
XX
DT 09-SEP-2003 (first entry)
XX
DE Secreted and transmembrane protein associated oligonucleotide #163.
XX

KW Human; secreted and transmembrane protein; PRO; virucide; gene therapy;
KW cell death; growth induction cascade; blood coagulation cascade;
KW viral infection; ss.
XX
OS Homo sapiens.
XX
PN US2003050239-A1.
XX
PD 13-MAR-2003.
XX
PF 15-OCT-2001; 2001US-00978191.
XX
PR 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 17-MAR-1998; 98US-00040220.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078910P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 31-MAR-1998; 98US-0080105P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080165P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080328P.
PR 01-APR-1998; 98US-0080333P.
PR 01-APR-1998; 98US-0080334P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 08-APR-1998; 98US-0081071P.
PR 09-APR-1998; 98US-0081195P.
PR 09-APR-1998; 98US-0081203P.
PR 09-APR-1998; 98US-0081229P.
PR 15-APR-1998; 98US-0081817P.
PR 15-APR-1998; 98US-0081819P.
PR 15-APR-1998; 98US-0081838P.
PR 15-APR-1998; 98US-0081952P.
PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082700P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0082796P.
PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083392P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0083496P.
PR 29-APR-1998; 98US-0083499P.
PR 29-APR-1998; 98US-0083500P.
PR 29-APR-1998; 98US-0083545P.
PR 29-APR-1998; 98US-0083554P.
PR 29-APR-1998; 98US-0083558P.
PR 29-APR-1998; 98US-0083559P.
PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 06-MAY-1998; 98US-0084441P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
PR 07-MAY-1998; 98US-0084637P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 13-MAY-1998; 98US-0085323P.
PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
PR 15-MAY-1998; 98US-0085573P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-0085697P.
PR 15-MAY-1998; 98US-0085700P.
PR 15-MAY-1998; 98US-0085704P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086414P.
PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087106P.
PR 28-MAY-1998; 98US-0087208P.
PR 26-JUN-1998; 98US-00105413.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98US-00168978.
PR 07-OCT-1998; 98WO-US021141.
PR 02-NOV-1998; 98US-00184216.
PR 06-NOV-1998; 98US-00187368.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.
PR 07-DEC-1998; 98US-00202054.
PR 22-DEC-1998; 98US-00218517.
PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 05-MAR-1999; 99US-00254465.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99US-00265686.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-00267213.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 12-APR-1999; 99US-00284291.
PR 21-APR-1999; 99US-0130232P.
PR 26-APR-1999; 99US-0131022P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-00311832.
PR 14-MAY-1999; 99US-0134287P.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 25-AUG-1999; 99US-00380137.
PR 25-AUG-1999; 99US-00380138.
PR 25-AUG-1999; 99US-00380142.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.

PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000US-00709238.
PR 27-NOV-2000; 2000US-00723749.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
PR 22-MAR-2001; 2001US-00816920.
PR 22-MAR-2001; 2001WO-US009552.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
||||| || |||| |||
Db 17 GGAGGTCGACTTCCACT 1

RESULT 862
ABZ68345/c
ID ABZ68345 standard; DNA; 18 BP.
XX
AC ABZ68345;
XX
DT 22-APR-2003 (first entry)
XX
DE PCR primer VPH1 used for amplification of vph marker.
XX
KW Genetic disruption; mutation; bacterial cell; transposable element; vph;
KW PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO2003002738-A1.
XX
PD 09-JAN-2003.
XX
PF 24-JUN-2002; 2002WO-GB002884.
XX
PR 28-JUN-2001; 2001GB-00015894.
XX
PA (PLAN-) PLANT BIOSCIENCE LTD.
XX
PI Fowler K, Kieser TE;
XX
DR WPI; 2003-201505/19.
XX
PT Generating a mutation in a bacterial host cell (e.g. Streptomyces spp.),
PT comprises providing a bacterial donor cell (e.g. Escherichia coli)
PT comprising a plasmid and introducing the plasmid to the host cell by
PT conjugation.
XX
PS Example 1; Page 29; 69pp; English.
XX
CC The specification describes a method for generating genetic disruption
CC (mutation) in bacterial cells. The method comprises providing a bacterial
CC donor cell having a plasmid which comprises a transposable element
CC encoding functions to enable transposition of the transposable element
CC into the host cell nucleic acid and comprising a marker gene and an
CC origin of transfer; and introducing the plasmid from the donor cell to
CC the host cell by conjugation. The method is useful in generating genetic
CC disruptions in bacterial host cells, especially Streptomyces species, and
CC more particularly for generating libraries of bacterial host cells having
CC such disruptions. PCR primers ABZ68345-46 were used to amplify the vph
CC marker from plasmids of the invention
XX
SQ Sequence 18 BP; 1 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 208 AAGCAGAGAACTCGGTG 224
||||||| || |||||
Db 17 AAGCAGACCACCCGGTG 1

RESULT 863
ACA63889/c
ID ACA63889 standard; DNA; 18 BP.
XX
AC ACA63889;
XX
DT 16-JUN-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein related primer #215.
XX
KW Human; secreted and transmembrane protein; PRO; antiinflammatory;
KW antiarteriosclerotic; cardiant; anti-infertility; anti-HIV; cytostatic;
KW antidiabetic; gene therapy; inflammatory disease; organ failure;
KW atherosclerosis; cardiac injury; infertility; birth defect;
KW premature aging; AIDS; cancer; diabetic complication; chromosome mapping;
KW gene mapping; pharmaceutical; diagnostic; biosensor; bioreactor;
KW tissue typing; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN US2002192706-A1.
XX
PD 19-DEC-2002.
XX
PF 24-OCT-2001; 2001US-00999832.
XX
PR 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.

PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 17-MAR-1998; 98US-00040220.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078910P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 31-MAR-1998; 98US-0080105P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080165P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080328P.
PR 01-APR-1998; 98US-0080333P.
PR 01-APR-1998; 98US-0080334P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 08-APR-1998; 98US-0081071P.
PR 09-APR-1998; 98US-0081195P.
PR 09-APR-1998; 98US-0081203P.
PR 09-APR-1998; 98US-0081229P.
PR 15-APR-1998; 98US-0081817P.
PR 15-APR-1998; 98US-0081819P.
PR 15-APR-1998; 98US-0081838P.
PR 15-APR-1998; 98US-0081952P.
PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082700P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0082796P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98WO-US024855.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-328860/31.
XX
PT New secreted and transmembrane nucleic acids and polypeptides, designated
PT as PRO, useful for treating inflammation, organ failure, atherosclerosis,
PT cardiac injury, infertility, birth defects, premature aging, AIDS, or
PT cancer.
XX
PS Example 95; Page 173; 453pp; English.
XX
CC The invention describes an isolated nucleic acid (I) comprising, or which
CC is at least 80 % sequence identity to, or the full-length coding sequence
CC of, any of 118 300-2100 nucleotide sequences, which encodes its
CC corresponding PRO polypeptide selected from 118 100-700 amino acid
CC sequences, all given in the specification. The nucleic acids and
CC polypeptides are useful for treating inflammatory diseases, organ
CC failure, atherosclerosis, cardiac injury, infertility, birth defects,
CC premature aging, AIDS, cancer, or diabetic complications. The nucleic
CC acids are useful as hybridisation probes, in chromosome and gene mapping,
CC and in generating antisense RNA or DNA. The polypeptides are useful as
CC pharmaceuticals, diagnostics, biosensors or bioreactors. Both are useful
CC in tissue typing. This sequence represents a novel human secreted and
CC transmembrane PRO polypeptide associated primer
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
||||| || |||| |||
Db 17 GGAGGTCGACTTCCACT 1

RESULT 864
ACA72053/c
ID ACA72053 standard; DNA; 18 BP.
XX
AC ACA72053;
XX
DT 11-AUG-2003 (first entry)
XX
DE Human PRO polypeptide associated oligonucleotide SEQ ID NO 519.
XX
KW Human; ds; thrombolytic agent; interferon; interleukin; cytokine;
KW erythropoietin; colony stimulating factor; cancer; colorectal carcinoma;
KW apoptosis related condition; AIDS; amyotrophic lateral sclerosis;
KW inflammatory disease; asthma; atherosclerosis; neurodegenerative disease;
KW gastrointestinal disorder; Alzheimer's disease; Parkinson's disease;
KW hypertension; myocardial ischaemia; kidney disease; carcinogenesis;
KW glomerulonephritis; lung disease; pulmonary hypertension; preeclampsia;
KW bronchial asthma; gastric ulcer; renal failure; cardiovascular disease;
KW inflammatory bowel disease; reproductive disorder; premature labour.
XX

OS Homo sapiens.
XX
PN US2002177553-A1.
XX
PD 28-NOV-2002.
XX
PF 15-OCT-2001; 2001US-00978192.
XX
PR 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 17-MAR-1998; 98US-00040220.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078910P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 26-JUN-1998; 98US-00105413.
PR 07-OCT-1998; 98US-00168978.
PR 07-OCT-1998; 98WO-US021141.
PR 02-NOV-1998; 98US-00184216.
PR 06-NOV-1998; 98US-00187368.
PR 20-NOV-1998; 98WO-US024855.
PR 07-DEC-1998; 98US-00202054.
PR 22-DEC-1998; 98US-00218517.
PR 05-JAN-1999; 99WO-US000106.
PR 05-MAR-1999; 99US-00254465.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99US-00265686.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-00267213.
PR 12-APR-1999; 99US-00284291.
PR 14-MAY-1999; 99US-00311832.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 25-AUG-1999; 99US-00380138.
PR 25-AUG-1999; 99US-00380142.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000US-00709238.
PR 27-NOV-2000; 2000US-00723749.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
PR 22-MAR-2001; 2001US-00816920.
PR 22-MAR-2001; 2001WO-US009552.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-328499/31.
XX
PT New isolated PRO polypeptides e.g. PRO213, PRO274 and PRO300, for use as
PT pharmaceuticals, diagnostics, biosensors and bioreactors, for identifying
PT modulators of receptor-ligand interactions.
XX
PS Disclosure; SEQ ID NO 519; 55pp; English.
XX
CC The invention relates to an isolated secreted and transmembrane
CC polypeptide, designated as PRO polypeptide. The PRO polypeptide is useful
CC in PRO polypeptide detection methods. The PRO polypeptide is useful for
CC linking a bioactive molecule to a cell. The PRO polypeptide or an
CC antibody against it is useful for modulating a biological activity of a
CC cell. The PRO polypeptide is useful in industrial applications including
CC pharmaceuticals, diagnostics, biosensors and bioreactors. The PRO
CC polypeptide is also useful as a thrombolytic agent, interferon,
CC interleukin, erythropoietin, colony stimulating factor and other
CC cytokines. The PRO polypeptide is useful for treating disease such as
CC cancer e.g. colorectal carcinoma; apoptosis related conditions e.g. AIDS,
CC amyotrophic lateral sclerosis; inflammatory disease e.g. asthma,
CC atherosclerosis; neurodegenerative disease e.g. Alzheimer's disease,
CC Parkinson's disease; cardiovascular disease e.g. hypertension and
CC myocardial ischaemia; kidney disease e.g. renal failure and
CC glomerulonephritis; lung disease e.g. pulmonary hypertension, bronchial
CC asthma; gastrointestinal disorders e.g. gastric ulcer and inflammatory
CC bowel disease; reproductive disorders e.g. premature labour and
CC preeclampsia; carcinogenesis. The present sequence represents a PRO
CC polypeptide associated oligonucleotide of the invention. Note: The
CC sequence data for this patent did not form part of the printed
CC specification but was obtained in electronic format directly from USPTO
CC at seqdata.uspto.gov/sequence.html?DocID=20020177553
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
||||| || |||| |||
Db 17 GGAGGTCGACTTCCACT 1

```
RESULT 865
ABX92693/c
ID   ABX92693 standard; DNA; 18 BP.
XX
AC   ABX92693;
XX
DT   08-MAY-2003  (first entry)
XX
DE   Human PRO DNA PCR primer SEQ ID No 519.
XX
KW   Human; PRO polypeptide; secreted and transmembrane protein;
KW   immune disorder; diabetes; hyper-insulinaemia; hypo-insulinaemia;
KW   cardiac insufficiency; nervous system disorder; kidney disorder;
KW   bone disorder; cartilage disorder; arthritis; tumour; wound healing;
KW   genetic disorder; cytostatic; antidiabetic; antiinflammatory;
KW   antiarthritic; anti-tumour; vulnerary; antianaemic; dermatological;
KW   cardiant; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002169284-A1.
XX
PD   14-NOV-2002.
XX
PF   16-OCT-2001; 2001US-00978697.
XX
PR   26-MAY-1981;   81US-00267213.
PR   17-OCT-1997;   97US-0062250P.
PR   03-NOV-1997;   97US-0064249P.
PR   13-NOV-1997;   97US-0065311P.
PR   21-NOV-1997;   97US-0066364P.
PR   10-MAR-1998;   98US-0077450P.
PR   11-MAR-1998;   98US-0077632P.
PR   11-MAR-1998;   98US-0077641P.
PR   11-MAR-1998;   98US-0077649P.
PR   12-MAR-1998;   98US-0077791P.
PR   13-MAR-1998;   98US-0078004P.
PR   17-MAR-1998;   98US-00040220.
PR   20-MAR-1998;   98US-0078886P.
PR   20-MAR-1998;   98US-0078910P.
PR   20-MAR-1998;   98US-0078936P.
PR   20-MAR-1998;   98US-0078939P.
PR   25-MAR-1998;   98US-0079294P.
PR   26-MAR-1998;   98US-0079656P.
PR   27-MAR-1998;   98US-0079663P.
PR   27-MAR-1998;   98US-0079664P.
PR   27-MAR-1998;   98US-0079689P.
PR   27-MAR-1998;   98US-0079728P.
PR   27-MAR-1998;   98US-0079786P.
PR   30-MAR-1998;   98US-0079920P.
PR   30-MAR-1998;   98US-0079923P.
PR   26-JUN-1998;   98US-00105413.
PR   07-OCT-1998;   98US-00168978.
PR   07-OCT-1998;   98WO-US021141.
PR   02-NOV-1998;   98US-00184216.
PR   06-NOV-1998;   98US-00187368.
PR   20-NOV-1998;   98WO-US024855.
PR   07-DEC-1998;   98US-00202054.
PR   22-DEC-1998;   98US-00218517.
PR   05-JAN-1999;   99WO-US000106.
PR   05-MAR-1999;   99US-00254465.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99US-00265686.
PR   10-MAR-1999;   99WO-US005190.
PR   12-APR-1999;   99US-00284291.
PR   14-MAY-1999;   99US-00311832.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   25-AUG-1999;   99US-00380137.
PR   25-AUG-1999;   99US-00380138.
PR   25-AUG-1999;   99US-00380142.
PR   30-NOV-1999;   99WO-US028313.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   28-JUL-2000; 2000WO-US020710.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000US-00709238.
PR   27-NOV-2000; 2000US-00723749.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001WO-US006520.
PR   22-MAR-2001; 2001US-00816744.
PR   22-MAR-2001; 2001US-00816920.
PR   22-MAR-2001; 2001WO-US009552.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001US-00872035.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   14-JUN-2001; 2001US-00882636.
PR   19-JUN-2001; 2001US-00886342.
PR   20-JUN-2001; 2001WO-US019692.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   30-JUL-2001; 2001US-00918585.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi A,  Baker KP,  Botstein D,  Desnoyers L,  Eaton D;
PI   Ferrara N,  Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME;
PI   Goddard A,  Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ;
PI   Kljavin IJ,  Kuo SS,  Napier MA,  Pan J,  Paoni NF,  Roy MA,  Shelton DL;
PI   Stewart TA,  Tumas D,  Williams PM,  Wood WI;
XX
DR   WPI; 2003-288163/28.
XX
PT   Novel secreted and transmembrane polypeptides and polynucleotides
PT   encoding them useful for treating cancer, kidney diseases, bone,
PT   cartilage disorders and immune deficiencies.
XX
PS   Example 95; Page 179; 459pp; English.
XX
CC   The present invention relates to the isolation of novel human PRO
CC   polypeptides, and the polynucleotide sequences encoding them. The PRO
CC   polypeptides are secreted and transmembrane proteins. The PRO
CC   polypeptides are useful for detecting other PRO polypeptides, for linking
CC   bioactive molecules to cells expressing PRO polypeptides, for modulating
CC   biological activities of cells expressing PRO polypeptides, and for for
CC   identifying agonists or antagonists. The bioactive molecule maybe a
CC   toxin, radiolabel or antibody, and causes apoptosis or death of the cell.
CC   The PRO polypeptides are useful for treating immune disorders, diabetes
CC   or hyper- or hypo-insulinaemia, cardiac insufficiency, nervous system
CC   disorders, kidney disorders, bone and cartilage disorders or arthritis,
CC   tumours, and wound healing. The polynucleotide sequences encoding PRO
CC   polypeptides are useful as hybridisation probes, in chromosome and gene
```

CC mapping, in the generation of antisense RNA and DNA, in the preparation
CC of PRO polypeptides, for generating transgenic animals or knockout
CC animals, for the genetic analysis of individuals with genetic disorders,
CC and in gene therapy. The present sequence represents a PCR primer used in
CC the examples of the present invention. Note: The sequence data for this
CC patent was obtained in electronic format directly from the USPTO web site
CC at seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
||||| || |||| |||
Db 17 GGAGGTCGACTTCCACT 1

RESULT 866
ACC45656/c
ID ACC45656 standard; DNA; 18 BP.
XX
AC ACC45656;
XX
DT 02-JUN-2003 (first entry)
XX
DE Human HBM STS marker forward primer #118.
XX
KW Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation;
KW gene therapy; bone density modulation; bone strength; trabecular number;
KW bone size; bone tissue connectivity; bone disease; osteoporosis; PCR;
KW osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200292764-A2.
XX
PD 21-NOV-2002.
XX
PF 13-MAY-2002; 2002WO-US014876.
XX
PR 11-MAY-2001; 2001US-0290071P.
PR 17-MAY-2001; 2001US-0291311P.
PR 01-FEB-2002; 2002US-0353058P.
PR 04-MAR-2002; 2002US-0361293P.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
PA (AMHP) WYETH.
XX
PI Babij P, Bex FJ, Yaworsky PJ, Bodine PV;
XX
DR WPI; 2003-129278/12.
XX
PT New transgenic animals (e.g. mice), useful as models for studying bone
PT density modulation, developing drugs for treating or preventing bone
PT diseases (e.g. osteoporosis), or diagnosing diseases characterized by
PT reduced bone density.
XX
PS Disclosure; Page 55; 603pp; English.
XX
CC The invention relates to novel transgenic animals expressing the high
CC bone mass (HBM) gene, expressing the corresponding wild type HBM gene,
CC comprising an alteration of the gene encoding LRP5 or LRP6, or expressing
CC an LRP5 that is modulated by an altered gene control sequence introduced
CC by homologous or non-homologous recombination. The transgenic animals are
CC for the study of bone density modulation or bone mass modulation. The
CC invention has osteopathic and cytostatic activity. The polynucleotides of
CC the invention may have a use in gene therapy. The transgenic animals and
CC nucleic acids are for the study of bone density modulation, where the
CC bone mass is modulated relative to non-transgenic animals of the same
CC species in more than one parameter selected from bone density, bone
CC strength, trabecular number, bone size, or bone tissue connectivity. The
CC transgenic animals, nucleic acids and methods are useful for identifying
CC molecules involved in bone development, and for developing pharmaceutical
CC compositions, which may be employed for treating or preventing bone
CC diseases, e.g. osteoporosis, osteomalacia, rickets, Paget's disease, or
CC neoplasms of the bone. The transgenic animals and nucleic acids are also
CC useful in methods for diagnosing diseases involved in bone development,
CC or characterised by reduced bone density or mass. The present sequence is
CC used in the exemplification of the invention
XX
SQ Sequence 18 BP; 3 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GGCCAGGAGTGAAACTG 17
|| ||||||||| |||
Db 18 GGGCAGGAGTGACTCTG 2

RESULT 867
ABX75208/c
ID ABX75208 standard; DNA; 18 BP.
XX
AC ABX75208;
XX
DT 25-MAR-2003 (first entry)
XX
DE Human 216 gene allele specific oligonucleotide probe #39.
XX
KW Human; mouse; ss; probe; gene 216; antiasthmatic; antiinflammatory;
KW anorectic; chromosome 20p13-p12; single nucleotide polymorphism; SNP;
KW gene therapy; respiratory disease; asthma; obesity;
KW bronchial hyper-responsiveness; chronic obstructive pulmonary disease;
KW adult respiratory distress syndrome; inflammatory bowel syndrome.
XX
OS Homo sapiens.
XX
PN WO200283077-A2.
XX
PD 24-OCT-2002.
XX
PF 15-APR-2002; 2002WO-US012063.
XX
PR 13-APR-2001; 2001US-00834597.
PR 13-APR-2001; 2001WO-US012245.
XX
PA (SCHE) SCHERING CORP.
PA (GENO-) GENOME THERAPEUTICS CORP.
XX
PI Keith T, Little RD, Van Eerdewegh P, Dupuis J, Del Mastro RG;
PI Simon J, Allen K, Pandit S;
XX
DR WPI; 2003-092960/08.
XX
PT New isolated gene 216 nucleic acids, useful for diagnosing, preventing or
PT treating a disorder, such as asthma, bronchial hyper-responsiveness,
PT chronic obstructive pulmonary disease, obesity or inflammatory bowel
PT syndrome.
XX
PS Example 10; Page 166; 650pp; English.
XX
CC This invention relates to a novel isolated nucleic acid, gene 216,
CC identified from human chromosome 20p13-p12. The invention also discloses
CC regions of the 216 gene that contain single nucleotide polymorphisms
CC (SNP's) which may be used as markers for disease susceptibility or
CC severity. The nucleotides of the invention may have antiasthmatic,
CC antiinflammatory or anorectic activities and may be used in gene therapy.
CC The nucleic acids, antibodies or its fragments are useful for diagnosing,
CC preventing or treating a disorder, such as respiratory diseases (e.g.
CC asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary
CC disease or adult respiratory distress syndrome), obesity, or inflammatory
CC bowel syndrome. The nucleic acids are also useful for identifying

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CC   increased susceptibility of a subject to the disorders mentioned. The
CC   nucleic acids can also be used as primers and templates for the
CC   recombinant production of disorder-associated peptides or polypeptides,
CC   for chromosome and gene mapping, or for tissue distribution studies. The
CC   present sequence represents a gene 216 specific oligonucleotide probe
CC   used in the scope of the invention
XX
SQ   Sequence 18 BP; 1 A; 3 C; 9 G; 5 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         92 CATCACCACGTCTGACC 108
               || ||||||  ||||||
Db         17 CAGCACCACAGCTGACC 1


RESULT 868
ABZ79946/c
ID   ABZ79946 standard; DNA; 18 BP.
XX
AC   ABZ79946;
XX
DT   19-MAY-2003  (first entry)
XX
DE   Mycobacterium tuberculosis rpsI PCR primer SEQ ID NO:16.
XX
KW   Mycobacterium tuberculosis; mutT2; alkA; ogt; Rv3908; mutY; Rv3909;
KW   detection; multidrug resistance; multiple drug resistance; MDR;
KW   infection; PCR primer; ss.
XX
OS   Mycobacterium tuberculosis.
OS   Synthetic.
XX
PN   WO2003016562-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-EP009679.
XX
PR   14-AUG-2001; 2001US-0311824P.
PR   21-AUG-2001; 2001US-0313523P.
XX
PA   (INSP ) INST PASTEUR.
XX
PI   Gicquel B;
XX
DR   WPI; 2003-256711/25.
XX
PT   Predicting the epidemic character of a Mycobacterium tuberculosis isolate
PT   and/or the acquisition of multiple drug resistance (MDR) by the isolate
PT   by detecting an alteration in the DNA repair system of the isolate.
XX
PS   Disclosure; Page 17; 83pp; English.
XX
CC   The present invention describes a method for predicting the epidemic
CC   character of a Mycobacterium tuberculosis isolate and/or a selective
CC   advantage to be maintained in the host and/or the acquisition of multiple
CC   drug resistance (MDR) by the isolate comprising detecting an alteration
CC   in the DNA repair system of the isolate. Also described: (1) detecting a
CC   Mycobacterium tuberculosis strain with a MDR phenotype; (2) a
CC   polynucleotide; (3) a kit for detecting Mycobacterium tuberculosis; (4)
CC   an Escherichia coli strain containing the plasmid pMYC2501; and (5)
CC   detecting in a patient infected by Mycobacterium tuberculosis a higher
CC   risk of being unable to eliminate the bacillus or of developing MDR
CC   tuberculosis. The method is useful for predicting the epidemic character
CC   of a Mycobacterium tuberculosis isolate and/or a selective advantage to
CC   be maintained in the host and/or the acquisition of MDR by the isolate.
CC   The present sequence represents a PCR primer for M. tuberculosis rpsI,
CC   which is used in the exemplification of the present invention
XX
SQ   Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        282 GGCACCAAGCTGGTGAA 298
              | |||| || |||||||
Db         18 GTCACCCAGTTGGTGAA 2


RESULT 869
ACA66434/c
ID   ACA66434 standard; DNA; 18 BP.
XX
AC   ACA66434;
XX
DT   24-JUN-2003  (first entry)
XX
DE   Human secreted/transmembrane protein PRO298 PCR primer #3.
XX
KW   Human; ss; PCR; secreted protein; transmembrane protein; PRO; primer;
KW   malignancy; cancer; ovarian cancer; colorectal cancer; sarcoma;
KW   leukaemia; lymphoma; inflammatory disease; necrosis; atherosclerosis;
KW   infertility; premature aging; psoriasis; inflammatory disease;
KW   renal disease; arthritis; immune-mediated alopecia; stroke; encephalitis;
KW   hepatitis; multiple sclerosis; gene therapy.
XX
OS   Homo sapiens.
XX
PN   US2003004102-A1.
XX
PD   02-JAN-2003.
XX
PF   15-OCT-2001; 2001US-00978189.
XX
PR   17-OCT-1997;   97US-0062250P.
PR   03-NOV-1997;   97US-0064249P.
PR   13-NOV-1997;   97US-0065311P.
PR   21-NOV-1997;   97US-0066364P.
PR   10-MAR-1998;   98US-0077450P.
PR   11-MAR-1998;   98US-0077632P.
PR   11-MAR-1998;   98US-0077641P.
PR   11-MAR-1998;   98US-0077649P.
PR   12-MAR-1998;   98US-0077791P.
PR   13-MAR-1998;   98US-0078004P.
PR   17-MAR-1998;   98US-00040220.
PR   20-MAR-1998;   98US-0078886P.
PR   20-MAR-1998;   98US-0078910P.
PR   20-MAR-1998;   98US-0078936P.
PR   20-MAR-1998;   98US-0078939P.
PR   25-MAR-1998;   98US-0079294P.
PR   26-MAR-1998;   98US-0079656P.
PR   27-MAR-1998;   98US-0079663P.
PR   27-MAR-1998;   98US-0079664P.
PR   27-MAR-1998;   98US-0079689P.
PR   27-MAR-1998;   98US-0079728P.
PR   27-MAR-1998;   98US-0079786P.
PR   30-MAR-1998;   98US-0079920P.
PR   30-MAR-1998;   98US-0079923P.
PR   26-JUN-1998;   98US-00105413.
PR   07-OCT-1998;   98US-00168978.
PR   07-OCT-1998;   98WO-US021141.
PR   02-NOV-1998;   98US-00184216.
PR   06-NOV-1998;   98US-00187368.
PR   20-NOV-1998;   98WO-US024855.
PR   07-DEC-1998;   98US-00202054.
PR   22-DEC-1998;   98US-00218517.
PR   05-JAN-1999;   99WO-US000106.
PR   05-MAR-1999;   99US-00254465.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99US-00265686.
PR   10-MAR-1999;   99WO-US005190.
PR   12-MAR-1999;   99US-00267213.
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PR 12-APR-1999; 99US-00284291.
PR 14-MAY-1999; 99US-00311832.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 25-AUG-1999; 99US-00380138.
PR 25-AUG-1999; 99US-00380142.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000US-00709238.
PR 10-NOV-2000; 2000WO-US030873.
PR 27-NOV-2000; 2000US-00723749.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
PR 22-MAR-2001; 2001US-00816920.
PR 22-MAR-2001; 2001WO-US009552.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-341189/32.
XX
PT New genes and secreted and transmembrane polypeptides (e.g. PRO337 or
PT PRO1559), useful for treating or diagnosing e.g. cancers,
PT atherosclerosis, infertility, stroke, encephalitis, hepatitis or multiple
PT sclerosis in mammals.
XX
PS Example 95; Page 180; 460pp; English.
XX
CC The invention relates to a new isolated nucleic acid molecule comprises a
CC sequence with at least 80% identity to: (a) a nucleotide encoding any of
CC 94 PRO polypeptides whose sequences are fully defined in the
CC specification; or (b) any of 94 nucleotide sequences fully defined in the
CC specification; or the full length coding sequence of any these 94
CC nucleotide sequences. Also included are an isolated PRO polypeptide
CC scoring at least 80% positives when compared to any of the PRO
CC polypeptide sequences cited above (or an isolated PRO polypeptide having
CC at least 80% amino acid sequence identity to: (a) an amino acid sequence
CC encoded by the nucleotide deposited with ATCC numbers listed in the
CC specification; (b) the PRO polypeptide, lacking its associated signal
CC peptide; or (c) an extracellular domain of the PRO polypeptide, with or
CC lacking its associated signal peptide), a vector comprising the nucleic
CC acid molecule, a host cell comprising the vector (and producing a PRO
CC polypeptide), a chimaeric molecule comprising the PRO polypeptide fused
CC to a heterologous amino acid sequence and an anti-PRO antibody. The PRO
CC polypeptides or polynucleotides are useful as pharmaceuticals,
CC diagnostics, biosensors or bioreactors. These are particularly useful for
CC detecting or treating e.g. malignancies or cancers (e.g. ovarian cancer,
CC colorectal cancer, sarcoma, leukaemia or lymphoma), inflammatory disease,
CC necrosis, atherosclerosis, infertility, premature aging, psoriasis,
CC inflammatory disease, renal disease, arthritis, immune-mediated alopecia,
CC stroke, encephalitis, hepatitis, or multiple sclerosis in mammals. The
CC PRO polypeptides are useful in drug screening, particularly as targets
CC for therapeutic intervention in these diseases, and in the diagnostic
CC determination of the presence of these diseases. The PRO polypeptides are
CC also useful as molecular weight markers, or for chromosome
CC identification. The PRO genes are useful as hybridisation probes, or for
CC screening libraries of human cDNA, genomic DNA or mRNA. The PRO genes may
CC also be used in gene therapy, particularly for replacing a defective
CC gene. The present sequence is a PCR primer used in the isolation of a
CC cDNA encoding a PRO polypeptide
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

```
  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        149 GGAGGCCGGCTTCGACT 165
              ||||| || |||| |||
Db         17 GGAGGTCGACTTCCACT 1
```

RESULT 870
ADA25058/c
ID ADA25058 standard; DNA; 18 BP.
XX
AC ADA25058;
XX
DT 20-NOV-2003 (first entry)
XX
DE Secreted and transmembrane PRO protein associated primer #219.
XX
KW Human; secreted and transmembrane protein; PRO; gene; ss; tissue typing;
KW chromosome identification; vaccine; cancer; retinal disorder;
KW sports-related joint disorder; osteoarthritis; rheumatoid arthritis;
KW wound healing; obesity; diabetes; hearing loss;
KW cardiac insufficiency disorder; kidney disorder; nervous system disorder;
KW haemoglobin associated disorder; expressed sequence tag; EST.
XX
OS Homo sapiens.
XX
PN US2003050241-A1.
XX
PD 13-MAR-2003.
XX
PF 16-OCT-2001; 2001US-00978564.
XX
PR 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.

PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078910P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 31-MAR-1998; 98US-0080105P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080165P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080328P.
PR 01-APR-1998; 98US-0080333P.
PR 01-APR-1998; 98US-0080334P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 08-APR-1998; 98US-0081071P.
PR 09-APR-1998; 98US-0081195P.
PR 09-APR-1998; 98US-0081203P.
PR 09-APR-1998; 98US-0081229P.
PR 15-APR-1998; 98US-0081817P.
PR 15-APR-1998; 98US-0081819P.
PR 15-APR-1998; 98US-0081838P.
PR 15-APR-1998; 98US-0081952P.
PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082700P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0082796P.
PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083392P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0083496P.
PR 29-APR-1998; 98US-0083499P.
PR 29-APR-1998; 98US-0083500P.
PR 29-APR-1998; 98US-0083545P.
PR 29-APR-1998; 98US-0083554P.
PR 29-APR-1998; 98US-0083558P.
PR 29-APR-1998; 98US-0083559P.
PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 06-MAY-1998; 98US-0084441P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
PR 07-MAY-1998; 98US-0084637P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 13-MAY-1998; 98US-0085323P.
PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
PR 15-MAY-1998; 98US-0085573P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-0085697P.
PR 15-MAY-1998; 98US-0085700P.
PR 15-MAY-1998; 98US-0085704P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086414P.
PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087106P.
PR 28-MAY-1998; 98US-0087208P.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.
PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 21-APR-1999; 99US-0130232P.
PR 26-APR-1999; 99US-0131022P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-0134287P.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-521814/49.
XX
PT New isolated PRO polypeptides for example extracellular, secreted and
PT membrane bound proteins, useful for modulating the biological activities
PT of cells and for treating, for example diabetes, cancer, rheumatoid
PT arthritis, and hearing loss.
XX
PS Example 95; Page 180; 461pp; English.
XX
CC The invention describes an isolated secreted and transmembrane (PRO)
CC polypeptide (I). PRO337 polypeptide is useful for detecting PRO4993
CC polypeptide in a sample, and vice versa. PRO725, PRO700 and PRO739 are
CC useful for detecting PRO1559 polypeptide in a sample, and PRO1559 is
CC useful for detecting PRO725, PRO700 and PRO739 in a sample. PRO4993 is
CC useful for linking a bioactive molecule to a cell expressing a PRO337
CC polypeptide, and PRO337 is useful for linking a bioactive molecule to a
CC cell expressing a PRO4993 polypeptide. PRO1559 is useful for linking a
CC bioactive molecule to a cell expressing a PRO735, PRO700 and PRO739
CC polypeptide, and PRO735, PRO700 and PRO739 polypeptides are useful for

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
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DT 08-SEP-2003 (first entry)
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KW peripheral neuropathy; diabetic peripheral neuropathy;
KW AIDS-associated neuropathy; Charcot-Marie-Tooth disease;
KW Refusum's disease; Abetalipoproteinaemia; Tangier disease;
KW Krabbe's disease; Metachromatic leukodystrophy; Fabry's disease;
KW Dejerine-Sottas syndrome; chromosome mapping; gene mapping; gene therapy;
KW PCR; primer; ss.
XX
OS Homo sapiens.
XX
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XX
PD 13-MAR-2003.
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XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Botstein D,  Desnoyers L,  Eaton DL;
PI   Ferrara N,  Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME;
PI   Goddard A,  Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ;
PI   Kljavin IJ,  Kuo SS,  Napier MA,  Pan J,  Paoni NF,  Roy MA,  Shelton DL;
PI   Stewart TA,  Tumas D,  Williams PM,  Wood WL;
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DR   WPI; 2003-503575/47.
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PT   Novel secreted and transmembrane polypeptide for modulating biological
PT   activity of cell expressing the polypeptide, identifying agonists or
PT   antagonists of polypeptide, and as molecular weight markers.
XX
PS   Example 95; Page 177; 459pp; English.
XX
CC   The invention describes an isolated, secreted and transmembrane
CC   polypeptide, termed PRO polypeptide (I). (I) is useful for detecting
CC   PRO4993, PRO337, PRO1559, PRO725, PRO700 or PRO739 polypeptide, and for
CC   linking a bioactive molecule to a cell expressing the above polypeptides.
CC   The bioactive molecule is a toxin, radiolabel or an antibody and causes
CC   cell death. (I) is useful as therapeutic agent, in medical and industrial
CC   applications e.g. for treating neuropathy, especially peripheral
CC   neuropathy, diabetic peripheral neuropathy, AIDS-associated neuropathy,
CC   Charcot-Marie-Tooth disease, Refusum's disease, Abetalipoproteinaemia,
CC   Tangier disease, Krabbe's disease, Metachromatic leukodystrophy, Fabry's

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
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DT   06-NOV-2003  (first entry)
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KW   primer; ss; inflammatory disease; organ failure; atherosclerosis;
KW   cardiac injury; infertility; birth defect; premature aging; AIDS; cancer;
KW   diabetic complication; tissue typing; human; PCR.
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OS   Homo sapiens.
XX
PN   US2003055216-A1.
XX
PD   20-MAR-2003.
XX
PF   17-OCT-2001; 2001US-00978824.
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PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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XX
DT 27-AUG-2003 (first entry)
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XX
KW Human; secreted and transmembrane protein; PRO; viral infection;
KW tumour growth; retinal disorder; injury; sight loss;
KW retinitis pigmentosum; age-related macular degeneration;
KW sport-related joint problem; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; wound healing; obesity; diabetes; insulinaemia;
KW kidney disorder; mesangial cell function; Berger disease; nephropathy;
KW celiac disease; dermatitis; Crohn disease; neuropathy;
KW cardiac- insufficiency disorder; peripheral neuropathy;
KW diabetic peripheral neuropathy; autonomic neuropathy;
KW reduced motility of the gastrointestinal tract;
KW atony of the urinary bladder; post polio syndrome; Krabbe's disease;
KW Charcot-Marie-Tooth disease; Fabry's disease; Tangier disease;
KW Refsum's disease; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN US2003049633-A1.
XX
PD 13-MAR-2003.
XX
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PR 20-NOV-1998; 98WO-US024855.
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PR 05-JAN-1999; 99WO-US000106.
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PR 30-NOV-1999; 99WO-US028313.
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PR 02-DEC-1999; 99WO-US028565.
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PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000US-00709238.
PR 27-NOV-2000; 2000US-00723749.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
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PR 22-MAR-2001; 2001WO-US009552.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy        149 GGAGGCCGGCTTCGACT 165
              ||||| || |||| |||
Db         17 GGAGGTCGACTTCCACT 1
```

RESULT 874
ADA24424/c
ID ADA24424 standard; DNA; 18 BP.
XX
AC ADA24424;
XX
DT 20-NOV-2003 (first entry)
XX
DE PCR primer #1 for generating human TSLL1 probe.
XX
KW Human tumour suppressor gene; TSLL1; hTSLL1; cancer; carcinoma;
KW pre-critical stage; cancer therapy; chemical therapy; radiotherapy;
KW TSLC1; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN US2003109016-A1.
XX
PD 12-JUN-2003.
XX
PF 29-AUG-2002; 2002US-00230335.
XX
PR 11-OCT-2001; 2001JP-00313966.
XX
PA (PRES-) PRESIDENT NAT CANCER CENT.
PA (BMLB-) BML INC.
XX
PI Murakami Y, Nomura S;
XX
DR WPI; 2003-626209/59.
XX
PT New protein encoded by tumor suppressor gene, designated as TSSL1 gene,
PT useful for preventing or treating cancers, predicting of prognosis of
PT cancer therapy, or diagnosing carcinoma in pre-clinical stages.
XX
PS Example; Page 6; 20pp; English.
XX
CC The present invention relates to the isolation of a human tumour
CC suppressor gene, TSLL1 (hTSLL1), and the encoding protein. The TSLL1 gene
CC and protein are useful for preventing and treating cancers. The gene is
CC useful for diagnosing carcinoma in pre-critical stages, qualitative
CC diagnosis of carcinoma, predicting the prognosis of cancer therapy, and
CC forecasting the sensitivity of a carcinoma to chemical therapy,
CC radiotherapy and gene therapy. The TSLL1 protein is homologous the TSLC1
CC protein. The present sequence represents a PCR primer used to generate a
CC probe for human TSLL1 cDNA.
XX
SQ Sequence 18 BP; 5 A; 7 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy        334 ACGACCAGGGCCGGCTG 350
              | | ||||||| |||||
Db         18 ATGTCCAGGGCTGGCTG 2
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RESULT 875
ADB98354/c

ID ADB98354 standard; DNA; 18 BP.
XX
AC ADB98354;
XX
DT 04-DEC-2003 (first entry)
XX
DE Sequence tagged site #235 used to prepare Zmax1 (LRP5) gene region map.
XX
KW Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
KW bone mass modulation; osteoporosis; STS; sequence tagged site; ds.
XX
OS Homo sapiens.
XX
PN WO200292000-A2.
XX
PD 21-NOV-2002.
XX
PF 13-MAY-2002; 2002WO-US014877.
XX
PR 11-MAY-2001; 2001US-0290071P.
PR 17-MAY-2001; 2001US-0291311P.
PR 01-FEB-2002; 2002US-0353058P.
PR 04-MAR-2002; 2002US-0361293P.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
PA (AMHP) WYETH.
XX
PI Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;
XX
DR WPI; 2003-129214/12.
XX
PT New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
PT diagnosing a HBM-like phenotype in a subject and for preparing a
PT composition for modulating bone mass and/or lipid levels in a subject
PT suffering from e.g. osteoporosis.
XX
PS Example 2; Page 62; 629pp; English.
XX
CC The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
CC LRP6 mutants, which results in a HBM-like phenotype when expressed in a
CC cell. The HBM-like phenotype results in bone mass modulation and/or lipid
CC level modulation. The invention is useful for diagnosing a HBM-like
CC phenotype in a subject and for preparing a composition for modulating
CC bone mass and/or lipid levels in a subject suffering from e.g.
CC osteoporosis. The present sequence is a Sequence Tagged Site (STS)
CC marker, which was used to prepare a physical map of the Zmax1 (LRP5) gene
CC region.
XX
SQ Sequence 18 BP; 3 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match   2.9%; Score 12.2; DB 1; Length 18;
  Best Local Similarity   82.4%; Pred. No. 4.7e+02;
  Matches   14; Conservative   0; Mismatches   3; Indels   0; Gaps   0;

Qy   1 GGCCAGGAGTGAAACTG 17
              || ||||||||| |||
Db   18 GGGCAGGAGTGACTCTG 2

RESULT 876
ADB74025/c
ID ADB74025 standard; DNA; 18 BP.
XX
AC ADB74025;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human PRO DNA PCR primer #218.
XX
KW Human; PRO polypeptide; secreted protein; transmembrane protein;
KW cell death; neuropathy; neuropathy related disease;
KW Charcot-Marie-Tooth disorder; Refsum's disease; Krabbe's disease;
KW chromosome mapping; gene mapping; genetic disorder; septic shock;
KW antibacterial; immunosuppressive; neuroprotective; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN US2003045462-A1.
XX
PD 06-MAR-2003.
XX
PF 16-OCT-2001; 2001US-00978608.
XX
PR 17-OCT-1997; 97US-0062250P.
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PR 13-NOV-1997; 97US-0065311P.
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PR 11-MAR-1998; 98US-0077632P.
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PR 12-MAR-1998; 98US-0077791P.
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PR 17-MAR-1998; 98US-00040220.
PR 20-MAR-1998; 98US-0078886P.
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PR 22-APR-1998; 98US-0082700P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0082796P.
PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083392P.
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PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.

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PR   15-MAY-1998;   98US-0085700P.
PR   15-MAY-1998;   98US-0085704P.
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PR   30-JUL-1998;   98US-0094651P.
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PR   20-NOV-1998;   98US-0109304P.
PR   20-NOV-1998;   98WO-US024855.
PR   07-DEC-1998;   98US-00202054.
PR   22-DEC-1998;   98US-00218517.
PR   22-DEC-1998;   98US-0113296P.
PR   23-DEC-1998;   98US-0113621P.
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PR   05-MAR-1999;   99US-00254465.
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PR   10-MAR-1999;   99WO-US005190.
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PR   29-MAR-1999;   99US-0126773P.
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PR   26-APR-1999;   99US-0131022P.
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PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
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PR   23-JUN-1999;   99US-0141037P.
PR   07-JUL-1999;   99US-0142680P.
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PR   28-JUL-1999;   99US-0146222P.
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PR   24-FEB-2000;  2000WO-US005004.
PR   02-MAR-2000;  2000WO-US005841.
PR   10-MAR-2000;  2000WO-US006319.
PR   21-MAR-2000;  2000WO-US007532.
PR   30-MAR-2000;  2000WO-US008439.
PR   17-MAY-2000;  2000WO-US013705.
PR   22-MAY-2000;  2000WO-US014042.
PR   30-MAY-2000;  2000WO-US014941.
PR   02-JUN-2000;  2000WO-US015264.
PR   28-JUL-2000;  2000WO-US020710.
PR   24-AUG-2000;  2000WO-US023328.
PR   08-NOV-2000;  2000US-00709238.
PR   27-NOV-2000;  2000US-00723749.
PR   01-DEC-2000;  2000WO-US032678.
PR   20-DEC-2000;  2000US-00747259.
PR   20-DEC-2000;  2000WO-US034956.
PR   28-FEB-2001;  2001WO-US006520.
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PR   22-MAR-2001;  2001WO-US009552.
PR   10-MAY-2001;  2001US-00854208.
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PR   25-MAY-2001;  2001WO-US017092.
PR   01-JUN-2001;  2001US-00872035.
PR   01-JUN-2001;  2001WO-US017800.
PR   05-JUN-2001;  2001US-00874503.
PR   14-JUN-2001;  2001US-00882636.
PR   19-JUN-2001;  2001US-00886342.
PR   20-JUN-2001;  2001WO-US019692.
PR   29-JUN-2001;  2001WO-US021066.
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PR   30-JUL-2001;  2001US-00918585.
XX
PA   (GETH ) GENENTECH INC.
XX

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        149 GGAGGCCGGCTTCGACT 165
              ||||| || |||| |||
Db         17 GGAGGTCGACTTCCACT 1


RESULT 877
ADA49752/c
ID   ADA49752 standard; DNA; 18 BP.
XX
AC   ADA49752;
XX
DT   04-DEC-2003  (first entry)
XX
DE   HCV antisense oligonucleotide ISIS 10549.
XX
KW   ss; hepatitis C virus; HCV; HCV-associated disease; HCV infection;
KW   fulminant hepatitis; chronic active hepatitis; cirrhosis;
KW   hepatocellular carcinoma; cancer; tumour; lower relapse rate; antisense.
XX
OS   Hepatitis C virus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .18
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate backbone"
```

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XX
PN   US2003171313-A1.
XX
PD   11-SEP-2003.
XX
PF   11-MAY-2001; 2001US-00853409.
XX
PR   10-SEP-1992;   92US-00945289.
PR   10-SEP-1993;   93WO-JP001293.
PR   09-MAR-1995;   95US-00397220.
PR   30-MAY-1995;   95US-00452841.
PR   17-MAY-1996;   96US-00650093.
PR   10-DEC-1997;   97US-00988321.
PR   18-OCT-2000; 2000US-00690936.
XX
PA   (ANDE/) ANDERSON K P.
PA   (HANE/) HANECAK R C.
PA   (NOZA/) NOZAKI C.
PA   (DORR/) DORR F A.
PA   (KWOH/) KWOH T J.
XX
PI   Anderson KP,  Hanecak RC,  Nozaki C,  Dorr FA,  Kwoh TJ;
XX
DR   WPI; 2003-697202/66.
XX
PT   New oligonucleotide, useful for preparing a composition for detecting,
PT   treating or preventing HCV-associated disease, e.g. HCV infection,
PT   fulminant hepatitis, chronic active hepatitis, cirrhosis or
PT   hepatocellular carcinoma.
XX
PS   Example 3; Page 11; 21pp; English.
XX
CC   The invention relates to a new hepatitis C virus (HCV) genomic or
CC   messenger RNA antisense oligonucleotide. The oligonucleotide is useful
CC   for preparing a composition for treating or preventing an HCV-associated
CC   disease, e.g., HCV infection, fulminant hepatitis, chronic active
CC   hepatitis, cirrhosis or hepatocellular carcinoma. Also for detection of
CC   HCV, HCV infection and HCV associated diseases. The oligonucleotide gives
CC   a more effective treatment than interferon alone with lower relapse
CC   rates. The present sequence represents a HCV antisense oligonucleotide.
XX
SQ   Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        261 ACGGTGCACCTGGAGCA 277
              || ||||||| |||||
Db         17 ACCGTGCACCATGAGCA 1


RESULT 878
ADA49743/c
ID   ADA49743 standard; DNA; 18 BP.
XX
AC   ADA49743;
XX
DT   04-DEC-2003  (first entry)
XX
DE   HCV antisense oligonucleotide ISIS 9559.
XX
KW   ss; hepatitis C virus; HCV; HCV-associated disease; HCV infection;
KW   fulminant hepatitis; chronic active hepatitis; cirrhosis;
KW   hepatocellular carcinoma; cancer; tumour; lower relapse rate; antisense.
XX
OS   Hepatitis C virus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .18
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = phosphorothioate backbone"
```

```
XX
PN   US2003171313-A1.
XX
PD   11-SEP-2003.
XX
PF   11-MAY-2001; 2001US-00853409.
XX
PR   10-SEP-1992;   92US-00945289.
PR   10-SEP-1993;   93WO-JP001293.
PR   09-MAR-1995;   95US-00397220.
PR   30-MAY-1995;   95US-00452841.
PR   17-MAY-1996;   96US-00650093.
PR   10-DEC-1997;   97US-00988321.
PR   18-OCT-2000; 2000US-00690936.
XX
PA   (ANDE/) ANDERSON K P.
PA   (HANE/) HANECAK R C.
PA   (NOZA/) NOZAKI C.
PA   (DORR/) DORR F A.
PA   (KWOH/) KWOH T J.
XX
PI   Anderson KP,  Hanecak RC,  Nozaki C,  Dorr FA,  Kwoh TJ;
XX
DR   WPI; 2003-697202/66.
XX
PT   New oligonucleotide, useful for preparing a composition for detecting,
PT   treating or preventing HCV-associated disease, e.g. HCV infection,
PT   fulminant hepatitis, chronic active hepatitis, cirrhosis or
PT   hepatocellular carcinoma.
XX
PS   Example 3; Page 11; 21pp; English.
XX
CC   The invention relates to a new hepatitis C virus (HCV) genomic or
CC   messenger RNA antisense oligonucleotide. The oligonucleotide is useful
CC   for preparing a composition for treating or preventing an HCV-associated
CC   disease, e.g., HCV infection, fulminant hepatitis, chronic active
CC   hepatitis, cirrhosis or hepatocellular carcinoma. Also for detection of
CC   HCV, HCV infection and HCV associated diseases. The oligonucleotide gives
CC   a more effective treatment than interferon alone with lower relapse
CC   rates. The present sequence represents a HCV antisense oligonucleotide.
XX
SQ   Sequence 18 BP; 2 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        261 ACGGTGCACCTGGAGCA 277
              || ||||||| |||||
Db         18 ACCGTGCACCATGAGCA 2


RESULT 879
ADB79744/c
ID   ADB79744 standard; DNA; 18 BP.
XX
AC   ADB79744;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Vaccinia lister/PPVO NZ2 recombinant VVOV 96 PCR primer PPVO22r-3.
XX
KW   ss; primer; virucide; anti-HIV; hepatotropic; antiinflammatory;
KW   cytostatic; vulnerary; antiasthmatic; antiallergic; dermatological;
KW   antidiabetic; immunosuppressive; antirheumatic; antiarthritic;
KW   thyromimetic; protozoacide; amoebicide; antibacterial; gene therapy;
KW   virus; viral infections; non-viral infections; proliferative disease;
KW   inflammatory disease; allergic disease; autoimmune disease; PCR.
XX
OS   Parapoxvirus.
XX
PN   WO2003006654-A2.
XX
```

PD 23-JAN-2003.
XX
PF 12-JUN-2002; 2002WO-EP006440.
XX
PR 13-JUN-2001; 2001NZ-00512341.
XX
PA (FARB) BAYER AG.
XX
PI Weber O, Friederichs SM, Siegling A, Schlapp T, Mercer AA;
PI Fleming SB;
XX
DR WPI; 2003-221750/21.
XX
PT New polynucleotide and recombinant proteins of Parapoxvirus ovis, useful
PT for manufacturing a medicament for treating virus related disease, viral
PT infections, non-viral infections, proliferative disease or inflammatory
PT disease.
XX
PS Example 1; Page 23; 51pp; English.
XX
CC The invention relates to a novel purified and isolated polynucleotide
CC (N1) of Parapoxvirus ovis (PPVO) comprising a nucleotide sequence (S1,
CC not defined in the specification), or its complementary sequence,
CC fragment or functional variant. A polynucleotide of the invention has
CC virucide, anti-HIV, hepatotropic, antiinflammatory, cytostatic,
CC vulnerary, antiasthmatic, antiallergic, dermatological, antidiabetic,
CC immunosuppressive, antirheumatic, antiarthritic, thyromimetic,
CC protozoacide, amoebicide, and antibacterial activity. The polynucleotides
CC may have a use in gene therapy. The recombinant proteins encoded by the
CC polynucleotides, or recombinant viruses comprising a Vaccinia virus
CC genome and fragments of a PPVO genome are useful for manufacturing
CC pharmaceutical compositions for treating virus related disease (e.g.
CC hepatitis, papillomatosis, herpes virus infections, liver fibrosis, HIV
CC infections or influenza), viral infections, non-viral infections (e.g.
CC infections with mycobacteria, mycoplasma, amoeba or plasmodia),
CC proliferative disease (e.g. cancer, leukaemia, warts or other skin
CC neoplasms), inflammatory disease (e.g. Crohn's disease, COPD, asthma or
CC conditions related to healing of wounds), allergic disease, and/or
CC autoimmune diseases (systemic lupus erythematosus, Sjogren's disease,
CC Hashimoto's thyroiditis, rheumatoid arthritis or diabetes mellitus). The
CC present sequence is used in the exemplification of the invention.
XX
SQ Sequence 18 BP; 2 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy         37 ACGAAGATGGCCACCAC 53
              ||| | |||||||||| |
Db         17 ACGTACATGGCCACCGC 1
```

RESULT 880
ADB54025
ID ADB54025 standard; DNA; 18 BP.
XX
AC ADB54025;
XX
DT 04-DEC-2003 (first entry)
XX
DE Oligonucleotide 17 used to analyse CpG positions within genomic DNA.
XX
KW colon cell proliferative disorder; non methylated CpG dinucleotide;
KW cytostatic; cancer; adenoma; carcinoma; cytosine methylation state; ss.
XX
OS Unidentified.
XX
PN WO2003072821-A2.
XX
PD 04-SEP-2003.
XX
PF 27-FEB-2003; 2003WO-EP002035.
XX
PR 27-FEB-2002; 2002EP-00004551.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Adorjan P, Burger M, Maier S, Nimmrich I, Becker E, Lesche R;
PI Rujan T, Schmitt A;
XX
DR WPI; 2003-731620/69.
XX
PT Detecting and differentiating between colon cell proliferative disorders
PT associated with a gene or its regulatory regions comprises contacting a
PT target nucleic acid in a biological sample obtained from the subject with
PT a reagent.
XX
PS Claim 39; SEQ ID NO 81; 74pp; English.
XX
CC The invention relates to a novel method for detecting and differentiating
CC between colon cell proliferative disorders associated with at least one
CC gene or its regulatory regions. The method comprises contacting a target
CC nucleic acid in a biological sample obtained from the subject with at
CC least one reagent or a series of reagents, where the reagent or series of
CC reagents, distinguishes between methylated and non methylated CpG
CC dinucleotides within the target nucleic acid. The molecules of the
CC invention demonstrate cytostatic activity whilst the method may useful
CC for detecting and differentiating between colon cell proliferative
CC disorders, including cancers such as colon adenoma and colon carcinoma.
CC The PNA (peptide nucleic acid)-oligomers are useful as probes for
CC determining cytosine methylation state or single nucleotide
CC polymorphisms. The current sequence is that of the oligonucleotide of the
CC invention which was used to analyse the CpG positions within the genomic
CC DNA regions. This sequence is not shown within the specification but is
CC taken from Wipoweb.
XX
SQ Sequence 18 BP; 4 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy        177 GAGTCCAAGGCACATAT 193
              |||||| |||||| ||
Db          2 GAGTCCCCGGCACACAT 18
```

RESULT 881
ADB76741/c
ID ADB76741 standard; DNA; 18 BP.
XX
AC ADB76741;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human PRO DNA PCR primer #218.
XX
KW Human; PRO polypeptide; secreted protein; transmembrane protein;
KW cell death; neuropathy; neuropathy related disease;
KW Charcot-Marie-Tooth disorder; Refsum's disease; Krabbe's disease;
KW chromosome mapping; gene mapping; genetic disorder; septic shock;
KW antibacterial; immunosuppressive; neuroprotective; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN US2003083248-A1.
XX
PD 01-MAY-2003.
XX
PF 16-OCT-2001; 2001US-00978757.
XX
PR 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.

PR 10-MAR-1998; 98US-0077450P.
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PR 20-MAR-1998; 98US-0078886P.
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PR 15-APR-1998; 98US-0081955P.
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PR 22-APR-1998; 98US-0082797P.
PR 22-APR-1998; 98US-0082804P.
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PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083322P.
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PR 29-APR-1998; 98US-0083500P.
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PR 29-APR-1998; 98US-0083559P.
PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 06-MAY-1998; 98US-0084441P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
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PR 07-MAY-1998; 98US-0084643P.
PR 13-MAY-1998; 98US-0085323P.
PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
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PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
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PR 15-MAY-1998; 98US-0085700P.
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PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086414P.
PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087106P.
PR 28-MAY-1998; 98US-0087208P.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.
PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 21-APR-1999; 99US-0130232P.
PR 26-APR-1999; 99US-0131022P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-0134287P.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.

XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-755118/71.
XX
PT New PRO polypeptides useful for treating peripheral neuropathy,
PT neuropathies associated with systemic disease such as post-polio syndrome
PT or AIDS-associated syndrome.
XX
PS Example 95; Page 174; 425pp; English.
XX
CC The present invention relates to the isolation of novel human PRO
CC polypeptides, and the polynucleotide sequences encoding them. The PRO
CC polypeptides are secreted and transmembrane proteins. The PRO
CC polypeptides are useful for detecting other PRO polypeptides, for linking
CC bioactive molecules to cells expressing PRO polypeptides, for modulating
CC biological activities of cells expressing PRO polypeptides, and for
CC identifying agonists or antagonists. The bioactive molecule maybe a
CC toxin, radiolabel or antibody, and cause cell death. The PRO polypeptides
CC are useful for treating neuropathy and neuropathy related diseases such
CC as Charcot-Marie-Tooth disorder, Refsum's disease, and Krabbe's disease.
CC The polynucleotide sequences encoding PRO polypeptides are useful as
CC hybridisation probes, in chromosome and gene mapping, in the generation
CC of antisense RNA and DNA, in the preparation of PRO polypeptides, for

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy        149 GGAGGCCGGCTTCGACT 165
              ||||| || |||| |||
Db         17 GGAGGTCGACTTCCACT 1
```

RESULT 882
ADC44167/c
ID ADC44167 standard; DNA; 18 BP.
XX
AC ADC44167;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human PRO 298 PCR primer #3.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003054986-A1.
XX
PD 20-MAR-2003.
XX
PF 16-OCT-2001; 2001US-00981915.
XX
PR 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 17-MAR-1998; 98US-00040220.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078910P.
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PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
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PR 31-MAR-1998; 98US-0080194P.
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PR 08-APR-1998; 98US-0081070P.
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PR 23-APR-1998; 98US-0082796P.
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PR 29-APR-1998; 98US-0083392P.
PR 29-APR-1998; 98US-0083495P.
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PR 29-APR-1998; 98US-0083554P.
PR 29-APR-1998; 98US-0083558P.
PR 29-APR-1998; 98US-0083559P.
PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 06-MAY-1998; 98US-0084441P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
PR 07-MAY-1998; 98US-0084637P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 13-MAY-1998; 98US-0085323P.
PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
PR 15-MAY-1998; 98US-0085573P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-0085697P.
PR 15-MAY-1998; 98US-0085700P.
PR 15-MAY-1998; 98US-0085704P.
PR 18-MAY-1998; 98US-0086023P.

PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086414P.
PR 22-MAY-1998; 98US-0086430P.
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PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087106P.
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PR 26-JUN-1998; 98US-00105413.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98US-00168978.
PR 07-OCT-1998; 98WO-US021141.
PR 02-NOV-1998; 98US-00184216.
PR 06-NOV-1998; 98US-00187368.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.
PR 07-DEC-1998; 98US-00202054.
PR 22-DEC-1998; 98US-00218517.
PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 05-MAR-1999; 99US-00254465.
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Query Match 2.9%; Score 12.2; DB 1; Length 18;
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PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

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KW auditory; tumour growth; retinal disorder; sports-related joint problem;
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KW tissue growth; muscle generation; muscle regeneration;
KW amyotrophic lateral sclerosis; neuropathy; AIDS-associated neuropathy;
KW diabetic peripheral neuropathy; chromosome identification; antagonist;
KW tissue typing; immunohistochemical staining; primer; ss.
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XX
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PD 27-MAR-2003.
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PA   (GETH ) GENENTECH INC.
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PI   Goddard A,  Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ;
PI   Kljavin IJ,  Kuo SS,  Napier MA,  Pan J,  Paoni NF,  Roy MA,  Shelton DL;
PI   Stewart TA,  Tumas D,  Williams PM,  Wood WI;
XX
DR   WPI; 2003-596568/56.
XX
PT   Novel secreted and transmembrane polypeptides and polynucleotides
PT   encoding them, useful for treating wound healing, tissue growth and
PT   muscle generation and regeneration, amyotrophic lateral sclerosis or
PT   neuropathy.
XX
PS   Example 95; SEQ ID NO 519; 472pp; English.
XX
CC   The invention describes an isolated secereted and transmembrane PRO
CC   polypeptide (I). PRO polypeptide such as PRO213, PRO700, PRO320 or PRO615
CC   is useful in biotechnological and medical research, as well as in various
CC   industrial applications. PRO polypeptide such as PRO300, PRO866, PRO703,
CC   PRO708, PRO320, PRO351, PRO352, PRO381, PRO615, PRO618, PRO772, PRO853,
CC   PRO860 or PRO846 is useful for therapeutic purposes. PRO363 is useful
CC   therapeutically in vivo for lessening the effects of viral infection.
CC   PRO200 is useful for the treatment of wound healing, tissue growth and
CC   muscle generation and regeneration. PRO337 is useful for treating
CC   amyotrophic lateral sclerosis, neuropathy, AIDS-associated neuropathy or
CC   diabetic peripheral neuropathy. A polynucleotide (II) encoding (I) is
CC   useful for generating transgenic animals or knockout animals which are
CC   useful in the development and screening of therapeutically useful
CC   reagents, as probes for generating a pool of sequences for identifying
CC   related PRO coding sequences, and to construct hybridisation probes for
CC   mapping the gene which encodes the PRO and for the genetic analysis of
CC   individuals with genetic disorders, for recombinantly expressing (I) and
CC   for chromosome identification. (I) is useful as molecular marker for
CC   protein electrophoresis purposes, and as therapeutic agents. (I) is also
CC   useful for screening compounds to identify those that mimic the PRO
CC   polypeptide (agonists) or prevent the effect of the PRO polypeptide
CC   (antagonists). (I) and (II) are useful for tissue typing. PRO antibodies
CC   are useful for immunohistochemical staining and/or assay of sample
CC   fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g.
CC   detecting its expression in specific cells, tissues or serum, and for
CC   affinity purification of PRO from recombinant cell culture or natural
CC   sources. This sequence represents a human secereted and transmembrane PRO
CC   protein associated primer.
XX
SQ   Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

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Db         17 GGAGGTCGACTTCCACT 1


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DT   18-DEC-2003  (first entry)
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KW   ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW   auditory; tumour growth; retinal disorder; sports-related joint problem;
KW   articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW   wound healing; hearing loss; primer.
XX
OS   Homo sapiens.
XX
PN   US2003064407-A1.
XX
PD   03-APR-2003.
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PF   24-OCT-2001; 2001US-00999834.
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XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
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AC ADC63175;
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DT 18-DEC-2003 (first entry)
XX
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KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
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PD 10-APR-2003.
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PR   28-APR-1999;   99US-0131445P.
PR   14-MAY-1999;   99US-0134287P.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   16-JUN-1999;   99US-0139557P.
PR   30-NOV-1999;   99WO-US028313.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000277.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   10-MAR-2000; 2000WO-US006319.
PR   21-MAR-2000; 2000WO-US007532.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
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PR   24-AUG-2000; 2000WO-US023328.
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PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001WO-US006520.
PR   22-MAR-2001; 2001WO-US009552.
PR   25-MAY-2001; 2001WO-US017092.
PR   01-JUN-2001; 2001WO-US017800.
PR   20-JUN-2001; 2001WO-US019692.
PR   29-JUN-2001; 2001WO-US021066.
PR   09-JUL-2001; 2001WO-US021735.
PR   30-JUL-2001; 2001US-00918585.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Botstein D,  Desnoyers L,  Eaton DL;
PI   Ferrara N,  Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME;
PI   Goddard A,  Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ;
PI   Kljavin IJ,  Kuo SS,  Napier MA,  Pan J,  Paoni NF,  Roy MA,  Shelton DL;
PI   Stewart TA,  Tumas D,  Williams PM,  Wood WI;
XX
DR   WPI; 2003-695924/66.
XX
PT   New isolated secreted and transmembrane PRO polypeptides, useful in the
PT   preparation of a medicament for treating a condition responsive to the
PT   polypeptide, and as therapeutic agents e.g. vaccines.
XX
PS   Example 95; SEQ ID NO 519; 467pp; English.
XX
CC   The invention relates to an isolated PRO polypeptide (secreted or
CC   transmembrane protein) having at least 80% amino acid sequence identity
CC   to an amino acid sequence chosen from 94 fully defined sequences as given
CC   in the specification (including PRO lacking its associated signal
CC   peptide, a PRO extracellular domain with or without its associated signal
CC   peptide). Also included are nucleic acids encoding the PRO proteins
CC   mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC   comprising the vector and producing PRO, a chimaeric molecule comprising
CC   PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC   antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC   polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC   Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC   polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC   PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC   PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC   bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC   molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC   causes death of the cell. PRO337 polypeptide is useful for linking a

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
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Qy        149 GGAGGCCGGCTTCGACT 165
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Db         17 GGAGGTCGACTTCCACT 1


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ID   ADC68240 standard; DNA; 18 BP.
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AC   ADC68240;
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DT   18-DEC-2003  (first entry)
XX
DE   Human PRO 298 PCR primer #3.
XX
KW   Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW   ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW   auditory; tumour growth; retinal disorder; sports-related joint problem;
KW   articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW   wound healing; hearing loss; primer.
XX
OS   Homo sapiens.
XX
PN   US2003069178-A1.
XX
PD   10-APR-2003.
XX
PF   16-OCT-2001; 2001US-00978423.
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PR   11-MAR-1998;   98US-0077632P.
PR   11-MAR-1998;   98US-0077641P.
PR   11-MAR-1998;   98US-0077649P.
PR   12-MAR-1998;   98US-0077791P.
PR   13-MAR-1998;   98US-0078004P.
PR   20-MAR-1998;   98US-0078886P.
PR   20-MAR-1998;   98US-0078910P.
PR   20-MAR-1998;   98US-0078936P.
PR   20-MAR-1998;   98US-0078939P.
PR   25-MAR-1998;   98US-0079294P.
PR   26-MAR-1998;   98US-0079656P.
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PR 26-JUN-1998; 98US-0090863P.
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PR 01-JUL-1998; 98US-0091359P.
PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.
PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 21-APR-1999; 99US-0130232P.
PR 26-APR-1999; 99US-0131022P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-0134287P.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
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PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
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PR 16-DEC-1999; 99WO-US030095.
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PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
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PA (GETH) GENENTECH INC.
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PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
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PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-657582/62.
XX
PT Novel secreted and transmembrane polypeptides, designated PRO
PT polypeptides, and polynucleotides encoding them useful for treating
PT kidney diseases, bone, cartilage and retinal disorders.
XX
PS Example 95; SEQ ID NO 519; 468pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity

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CC   to an amino acid sequence chosen from 94 fully defined sequences as given
CC   in the specification (including PRO lacking its associated signal
CC   peptide, a PRO extracellular domain with or without its associated signal
CC   peptide). Also included are nucleic acids encoding the PRO proteins
CC   mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC   comprising the vector and producing PRO, a chimaeric molecule comprising
CC   PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC   antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC   polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC   Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC   polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC   PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        149 GGAGGCCGGCTTCGACT 165
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Db         17 GGAGGTCGACTTCCACT 1


RESULT 889
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ID   ADC41560 standard; DNA; 18 BP.
XX
AC   ADC41560;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human PRO 298 PCR primer #3.
XX
KW   Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW   ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW   auditory; tumour growth; retinal disorder; sports-related joint problem;
KW   articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW   wound healing; hearing loss; primer.
XX
OS   Homo sapiens.
XX
PN   US2003072745-A1.
XX
PD   17-APR-2003.
XX
PF   25-OCT-2001; 2001US-00013929.
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PR   17-OCT-1997;   97US-0062250P.
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PR   11-MAR-1998;   98US-0077632P.
PR   11-MAR-1998;   98US-0077641P.
PR   11-MAR-1998;   98US-0077649P.
PR   12-MAR-1998;   98US-0077791P.
PR   13-MAR-1998;   98US-0078004P.
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PR   20-MAR-1998;   98US-0078936P.
PR   20-MAR-1998;   98US-0078939P.
PR   25-MAR-1998;   98US-0079294P.
PR   26-MAR-1998;   98US-0079656P.
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PR 08-MAR-1999; 99WO-US005028.
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DR WPI; 2003-743806/70.
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PT Novel isolated secreted and transmembrane PRO polypeptides, useful in the
PT preparation of a medicament for treating a condition responsive to the
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX
PS Example 95; SEQ ID NO 519; 466pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
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Db 17 GGAGGTCGACTTCCACT 1

RESULT 890
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ID ADC67615 standard; DNA; 18 BP.
XX
AC ADC67615;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human PRO 298 PCR primer #3.
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KW vulnerary; virucide; neuroprotective; cytostatic; gene therapy;
KW tumour cell proliferation inihibitor;
KW secereted and transmembrane protein; PRO; viral infection; wound healing;
KW tissue growth; muscle generation; muscle regeneration;
KW amyotrophic lateral sclerosis; neuropathy; AIDS-associated neuropathy;
KW diabetic peripheral neuropathy; chromosome identification; antagonist;
KW tissue typing; immunohistochemical staining; primer; ss.
XX
OS Homo sapiens.
XX
PN US2003073131-A1.
XX
PD 17-APR-2003.
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PF 25-OCT-2001; 2001US-00016177.
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PR 12-MAR-1999; 99US-0123957P.
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PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
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PR 06-JAN-2000; 2000WO-US000277.
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PR 28-FEB-2001; 2001WO-US006520.
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PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-743810/70.
XX
PT Novel isolated secreted and transmembrane PRO polypeptides, useful in the
PT preparation of a medicament for treating a condition responsive to the
PT polypeptide, and as therapeutic agents e.g. vaccines.
XX
PS Example 95; SEQ ID NO 519; 464pp; English.
XX
CC The invention describes an isolated secereted and transmembrane PRO
CC polypeptide (I). PRO polypeptide such as PRO213, PRO700, PRO320 or PRO615
CC is useful in biotechnological and medical research, as well as in various
CC industrial applications. PRO polypeptide such as PRO300, PRO866, PRO703,
CC PRO708, PRO320, PRO351, PRO352, PRO381, PRO615, PRO618, PRO772, PRO853,
CC PRO860 or PRO846 is useful for therapeutic purposes. PRO363 is useful
CC therapeutically in vivo for lessening the effects of viral infection.
CC PRO200 is useful for the treatment of wound healing, tissue growth and
CC muscle generation and regeneration. PRO337 is useful for treating
CC amyotrophic lateral sclerosis, neuropathy, AIDS-associated neuropathy or

Query Match 2.9%; Score 12.2; DB 1; Length 18;

Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Db         17 GGAGGTCGACTTCCACT 1
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ID ADC62551 standard; DNA; 18 BP.
XX
AC ADC62551;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human PRO 298 PCR primer #3.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003073624-A1.
XX
PD 17-APR-2003.
XX
PF 15-OCT-2001; 2001US-00978193.
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PR 17-OCT-1997; 97US-0062250P.
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PA   (GETH ) GENENTECH INC.
XX

  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

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ID   ADC42184 standard; DNA; 18 BP.
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XX
DT   18-DEC-2003  (first entry)
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XX
KW   Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW   ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW   auditory; tumour growth; retinal disorder; sports-related joint problem;
KW   articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW   wound healing; hearing loss; primer.
XX
OS   Homo sapiens.
XX
PN   US2003104998-A1.
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PD   05-JUN-2003.
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PF   16-OCT-2001; 2001US-00978643.
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PR 11-FEB-2000; 2000WO-US003565.
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PR 02-MAR-2000; 2000WO-US005841.
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PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
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PR 22-MAR-2001; 2001US-00816920.
PR 22-MAR-2001; 2001WO-US009552.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
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Db 17 GGAGGTCGACTTCCACT 1

RESULT 893
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ID ADD24791 standard; DNA; 18 BP.
XX
AC ADD24791;
XX

DT 15-JAN-2004 (first entry)
XX
DE Human CYP2D6 mutants G1846A and G1758T probe H234.
XX
KW diagnostic; pharmaceutical tolerance; side effect; drug; human;
KW allelic variability; polymorphism; phase I; phase II;
KW detoxification mechanism; PCR; primer; probe; NAT2; CYP2D6; CYP1A2;
KW CYP3A4; mEH; TPMT; MTHFR; paraoxonase; CYP2C9; CYP2C19; CYP2E1; DPD; ss.
XX
OS Homo sapiens.
XX
PN WO2003018837-A2.
XX
PD 06-MAR-2003.
XX
PF 22-AUG-2002; 2002WO-EP009386.
XX
PR 24-AUG-2001; 2001DE-01040651.
PR 30-APR-2002; 2002DE-01019373.
XX
PA (ADNA-) ADNAGEN AG.
XX
PI Waschuetza S, Schnakenberg E, Lustig M;
XX
DR WPI; 2003-290079/28.
XX
PT Diagnostic kit, useful for assessing a subject's tolerance of drugs,
PT comprises reagents for determining alleles of genes encoding
PT detoxification enzymes.
XX
PS Claim 6; Page 19; 156pp; German.
XX
CC This invention describes a novel diagnostic kit for determining tolerance
CC of pharmaceuticals in humans by determining allelic variability of at
CC least two polymorphisms of a human enzyme involved in phase I and/or II
CC of the detoxification mechanism in a blood, tissue or other human sample,
CC where tolerance is determined from presence or absence of alleles. The
CC kit comprises two pairs of oligonucleotide primers, in which each pair
CC amplifies, by PCR, part of a gene for a human detoxification mechanism-
CC associated enzyme. The kit may also contain two further pairs of
CC oligonucleotides, serving as probes for detection of amplified DNA
CC segments, especially where the probes are complementary to a single
CC strand of one allele of the target gene. The probes are labelled with
CC fluorophores (LC-Red640 or LC-Red705 for 5'-labelling or fluorescein for
CC 3'-labelling) which generate a different signal in the hybridized and non
CC -hybridized condition. The enzymes detected include NAT2, CYP2D6, CYP1A2,
CC CYP3A4, mEH, TPMT, MTHFR, paraoxonase, CYP2C9, CYP2C19, CYP2E1 or DPD.
CC The kit is used to determine an individual's tolerance of a particular
CC drug, to establish a suitable dose and/or to predict if a subject will
CC show side-effects to a drug. The kit provides minimally invasive, safe
CC and reliable determination of the metabolic capacity of phase I and/or II
CC enzymes at the molecular level. This sequence represents a probe used in
CC the kit of the invention.
XX
SQ Sequence 18 BP; 2 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

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  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         47 CCACCACTCAGAGGAGT 63
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Db         17 CCATCACCCACAGGAGT 1
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RESULT 894
ADE15061/c
ID ADE15061 standard; DNA; 18 BP.
XX
AC ADE15061;
XX
DT 29-JAN-2004 (first entry)
XX
DE Beer spoilage-associated primer SEQ ID 256.
XX
KW ss; primer; detection; beer-spoilage; lactic acid bacteria;
KW Gram-negative bacteria; spoilage bacteria.
XX
OS Lactobacillus coryniformis.
XX
PN WO2002103043-A2.
XX
PD 27-DEC-2002.
XX
PF 19-JUN-2002; 2002WO-EP006808.
XX
PR 19-JUN-2001; 2001DE-01029410.
XX
PA (VERM-) VERMICON AG.
XX
PI Beimfohr C, Snaidr J;
XX
DR WPI; 2003-175243/17.
XX
PT New oligonucleotides, useful for rapid detection of beer-spoilage
PT bacteria by in situ hybridization, are specific for type, genus or
PT species.
XX
PS Claim 1; SEQ ID NO 256; 88pp; German.
XX
CC This invention describes novel oligonucleotides used in a method for
CC detecting beer-spoilage bacteria in a sample. The bacteria detected
CC include lactic acid bacteria of the genera Lactobacillus or Pediococcus,
CC especially the species L. coryniformis, L. perolens, L. buchneri, L.
CC plantarum, L. fructivorans, L. lindneri, L. casei, L. brevis or P.
CC damnosus or Gram-negative bacteria of the genera Pectinatus and
CC Megasphaera, specifically P. frisingensis, P. cerevisiiphilus and M.
CC cerevisiae. The oligonucleotides of the invention provide rapid detection
CC of spoilage bacteria (typically within 48 hours, compared with 7-12 days
CC for conventional culture methods), can detect all relevant bacteria in
CC parallel, can differentiate between species of the same genus, and are
CC easy to use. ADE14806-ADE15247 represent the oligonucleotides used in the
CC method of the invention.
XX
SQ Sequence 18 BP; 3 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

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  Query Match             2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        103 CTGACCGCGACCGCAGC 119
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Db         18 CTGACGTCGACCGAAGC 2
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RESULT 895
ADE15067/c
ID ADE15067 standard; DNA; 18 BP.
XX
AC ADE15067;
XX
DT 29-JAN-2004 (first entry)
XX
DE Beer spoilage-associated primer SEQ ID 262.
XX
KW ss; primer; detection; beer-spoilage; lactic acid bacteria;
KW Gram-negative bacteria; spoilage bacteria.
XX
OS Lactobacillus coryniformis.
XX
PN WO2002103043-A2.
XX
PD 27-DEC-2002.
XX
PF 19-JUN-2002; 2002WO-EP006808.
XX

PR 19-JUN-2001; 2001DE-01029410.
XX
PA (VERM-) VERMICON AG.
XX
PI Beimfohr C, Snaidr J;
XX
DR WPI; 2003-175243/17.
XX
PT New oligonucleotides, useful for rapid detection of beer-spoilage
PT bacteria by in situ hybridization, are specific for type, genus or
PT species.
XX
PS Claim 1; SEQ ID NO 262; 88pp; German.
XX
CC This invention describes novel oligonucleotides used in a method for
CC detecting beer-spoilage bacteria in a sample. The bacteria detected
CC include lactic acid bacteria of the genera Lactobacillus or Pediococcus,
CC especially the species L. coryniformis, L. perolens, L. buchneri, L.
CC plantarum, L. fructivorans, L. lindneri, L. casei, L. brevis or P.
CC damnosus or Gram-negative bacteria of the genera Pectinatus and
CC Megasphaera, specifically P. frisingensis, P. cerevisiiphilus and M.
CC cerevisiae. The oligonucleotides of the invention provide rapid detection
CC of spoilage bacteria (typically within 48 hours, compared with 7-12 days
CC for conventional culture methods), can detect all relevant bacteria in
CC parallel, can differentiate between species of the same genus, and are
CC easy to use. ADE14806-ADE15247 represent the oligonucleotides used in the
CC method of the invention.
XX
SQ Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy        103 CTGACCGCGACCGCAGC 119
              ||||| |||||| |||
Db         17 CTGACGTCGACCGAAGC 1
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RESULT 896
ADE49553/c
ID ADE49553 standard; DNA; 18 BP.
XX
AC ADE49553;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 298 PCR primer #3.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003096744-A1.
XX
PD 22-MAY-2003.
XX
PF 28-JAN-2002; 2002US-00978187.
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PR 06-MAY-1998; 98US-0084441P.
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PR 07-MAY-1998; 98US-0084643P.
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PR 22-MAY-1998; 98US-0086392P.
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PR 06-NOV-1998; 98US-00187368.
PR 20-NOV-1998; 98US-0109304P.
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PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
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PR 05-MAR-1999; 99US-00254465.
PR 08-MAR-1999; 99WO-US005028.
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PR 10-MAR-1999; 99WO-US005190.
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PR 02-JUN-1999; 99WO-US012252.
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PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
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PR 25-AUG-1999; 99US-00380142.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
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PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
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PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
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PR 08-NOV-2000; 2000US-00709238.
PR 27-NOV-2000; 2000US-00723749.
PR 01-DEC-2000; 2000WO-US032678.
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PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
PR 22-MAR-2001; 2001US-00816920.
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PR 20-JUN-2001; 2001WO-US019692.
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PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
||||| || |||| |||
Db 17 GGAGGTCGACTTCCACT 1

RESULT 897
ADE35607/c
ID ADE35607 standard; DNA; 18 BP.
XX
AC ADE35607;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 298 PCR primer #3.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003203434-A1.
XX
PD 30-OCT-2003.
XX
PF 18-OCT-2001; 2001US-00145088.
XX
PR 15-MAY-1998; 98US-0085689P.
PR 08-MAR-1999; 99WO-US005028.
PR 28-APR-1999; 99US-0131445P.
PR 25-AUG-1999; 99US-00380138.
PR 18-FEB-2000; 2000WO-US004341.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-875641/81.
XX

PT New genes, and its encoded secreted and transmembrane polypeptides,
PT useful for treating e.g. lung or breast tumors, osteoarthritis,
PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,
PT hypoinsulinemia or wounds.
XX
PS Example 95; SEQ ID NO 519; 462pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        149 GGAGGCCGGCTTCGACT 165
              ||||| || |||| |||
Db         17 GGAGGTCGACTTCCACT 1
```

RESULT 898
ADE16721/c
ID ADE16721 standard; DNA; 18 BP.
XX
AC ADE16721;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 298 PCR primer #3.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.

XX
PN US2003203435-A1.
XX
PD 30-OCT-2003.
XX
PF 18-OCT-2001; 2001US-00145092.
XX
PR 30-APR-1998; 98US-0083742P.
PR 08-MAR-1999; 99WO-US005028.
PR 23-JUN-1999; 99US-0141037P.
PR 25-AUG-1999; 99US-00380138.
PR 18-FEB-2000; 2000WO-US004341.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-875642/81.
XX
PT New genes, and its encoded secreted and transmembrane polypeptides,
PT useful for treating e.g. lung or breast tumors, osteoarthritis,
PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,
PT hypoinsulinemia or wounds.
XX
PS Example 95; SEQ ID NO 519; 452pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;

```
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        149 GGAGGCCGGCTTCGACT 165
              ||||| || |||| |||
Db         17 GGAGGTCGACTTCCACT 1


RESULT 899
ADD73336/c
ID   ADD73336 standard; DNA; 18 BP.
XX
AC   ADD73336;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human PRO 298 PCR primer #3.
XX
KW   Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW   ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW   auditory; tumour growth; retinal disorder; sports-related joint problem;
KW   articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW   wound healing; hearing loss; primer.
XX
OS   Homo sapiens.
XX
PN   US2003203436-A1.
XX
PD   30-OCT-2003.
XX
PF   18-OCT-2001; 2001US-00145129.
XX
PR   22-MAY-1998;   98US-0086414P.
PR   22-DEC-1998;   98US-0113296P.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   12-APR-1999;   99US-00284291.
PR   25-AUG-1999;   99US-00380138.
PR   18-FEB-2000; 2000WO-US004341.
PR   30-JUL-2001; 2001US-00918585.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Botstein D,  Desnoyers L,  Eaton DL;
PI   Ferrara N,  Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME;
PI   Goddard A,  Godowski PJ,  Grimaldi JC,  Gurney AL,  Hillan KJ;
PI   Kljavin IJ,  Kuo SS,  Napier MA,  Pan J,  Paoni NF,  Roy MA,  Shelton DL;
PI   Stewart TA,  Tumas D,  Williams PM,  Wood WI;
XX
DR   WPI; 2003-875643/81.
XX
PT   New PRO genes and encoded secreted and transmembrane polypeptides, useful
PT   for treating e.g. lung or breast tumors, osteoarthritis, rheumatoid
PT   arthritis, obesity, diabetes, hyperinsulinemia, hypoinsulinemia or
PT   wounds.
XX
PS   Example 95; SEQ ID NO 519; 453pp; English.
XX
CC   The invention relates to an isolated PRO polypeptide (secreted or
CC   transmembrane protein) having at least 80% amino acid sequence identity
CC   to an amino acid sequence chosen from 94 fully defined sequences as given
CC   in the specification (including PRO lacking its associated signal
CC   peptide, a PRO extracellular domain with or without its associated signal
CC   peptide). Also included are nucleic acids encoding the PRO proteins
CC   mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC   comprising the vector and producing PRO, a chimaeric molecule comprising
CC   PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC   antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC   polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC   Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC   polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC   PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC   PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC   bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC   molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC   causes death of the cell. PRO337 polypeptide is useful for linking a
CC   bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC   PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC   to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC   useful for linking a bioactive molecule to a cell expressing PRO725,
CC   PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC   polypeptide is useful for modulating at least one biological activity of
CC   the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC   polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC   biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC   PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC   modulating the biological activity of the cell expressing PRO1559
CC   polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC   PRO739 polypeptide is useful for modulating the biological activity of
CC   the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC   polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC   sports-related joint problems, articular cartilage defects,
CC   osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC   mammals. The present sequence is a PCR primer used to isolate nucleic
CC   acid encoding a PRO protein.
XX
SQ   Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match              2.9%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 4.7e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        149 GGAGGCCGGCTTCGACT 165
              ||||| || |||| |||
Db         17 GGAGGTCGACTTCCACT 1


RESULT 900
ADD72694/c
ID   ADD72694 standard; DNA; 18 BP.
XX
AC   ADD72694;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human PRO 298 PCR primer #3.
XX
KW   Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW   ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW   auditory; tumour growth; retinal disorder; sports-related joint problem;
KW   articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW   wound healing; hearing loss; primer.
XX
OS   Homo sapiens.
XX
PN   US2003194781-A1.
XX
PD   16-OCT-2003.
XX
PF   19-OCT-2001; 2001US-00164929.
XX
PR   30-MAR-1998;   98US-0079920P.
PR   07-OCT-1998;   98WO-US021141.
PR   20-NOV-1998;   98WO-US024855.
PR   05-JAN-1999;   99WO-US000106.
PR   08-MAR-1999;   99WO-US005028.
PR   10-MAR-1999;   99WO-US005190.
PR   15-APR-1999;   99WO-US008313.
PR   14-MAY-1999;   99WO-US010733.
PR   02-JUN-1999;   99WO-US012252.
PR   25-AUG-1999;   99US-00380138.
PR   30-NOV-1999;   99WO-US028313.
PR   02-DEC-1999;   99WO-US028551.
PR   02-DEC-1999;   99WO-US028565.
PR   16-DEC-1999;   99WO-US030095.
PR   30-DEC-1999;   99WO-US031243.
PR   30-DEC-1999;   99WO-US031274.
```

PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-852598/79.
XX
PT New secreted and transmembrane PRO nucleic acids and polypeptides, useful
PT for stimulating the release of tumor necrosis factor alpha from human
PT blood and stimulating the proliferation of differentiation of chondrocyte
PT cells.
XX
PS Example 95; SEQ ID NO 519; 462pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
||||| || |||| |||
Db 17 GGAGGTCGACTTCCACT 1

RESULT 901
ADE17345/c
ID ADE17345 standard; DNA; 18 BP.
XX
AC ADE17345;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 298 PCR primer #3.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003203433-A1.
XX
PD 30-OCT-2003.
XX
PF 18-OCT-2001; 2001US-00145016.
XX
PR 06-MAY-1998; 98US-0084414P.
PR 22-DEC-1998; 98US-0113296P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 12-APR-1999; 99US-00284291.
PR 25-AUG-1999; 99US-00380138.
PR 18-FEB-2000; 2000WO-US004341.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2003-875640/81.
XX
PT New genes, and its encoded secreted and transmembrane polypeptides,
PT useful for treating e.g. lung or breast tumors, osteoarthritis,
PT rheumatoid arthritis, obesity, diabetes, hyperinsulinemia,
PT hypoinsulinemia or wounds.
XX
PS Example 95; SEQ ID NO 519; 459pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given

CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule
CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        149 GGAGGCCGGCTTCGACT 165
              ||||| || |||| |||
Db         17 GGAGGTCGACTTCCACT 1
```

RESULT 902
ADE48853/c
ID ADE48853 standard; DNA; 18 BP.
XX
AC ADE48853;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 298 PCR primer #3.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003104536-A1.
XX
PD 05-JUN-2003.
XX
PF 19-OCT-2001; 2001US-00166709.
XX
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98WO-US024855.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;
PI Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
PI Kljavin IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA, Shelton DL;
PI Stewart TA, Tumas D, Williams PM, Wood WI;
XX
DR WPI; 2004-008994/01.
XX
PT New isolated nucleic acid encoding a PRO polypeptide, e.g. PRO4993 or
PT PRO337, useful in molecular biology, chromosome and gene mapping, in
PT generating antisense RNA and DNA, and in gene therapy.
XX
PS Example 95; SEQ ID NO 519; 460pp; English.
XX
CC The invention relates to an isolated PRO polypeptide (secreted or
CC transmembrane protein) having at least 80% amino acid sequence identity
CC to an amino acid sequence chosen from 94 fully defined sequences as given
CC in the specification (including PRO lacking its associated signal
CC peptide, a PRO extracellular domain with or without its associated signal
CC peptide). Also included are nucleic acids encoding the PRO proteins
CC mentioned above, a vector comprising a PRO nucleic acid), a host cell
CC comprising the vector and producing PRO, a chimaeric molecule comprising
CC PRO fused to a heterologous amino acid sequence, and an anti-PRO
CC antibody. PRO337 polypeptide is useful for detecting a PRO4993
CC polypeptide in a sample suspected of containing PRO4993 polypeptide.
CC Similarly, PRO4993 polypeptide is useful for detecting PRO337
CC polypeptide. PRO725, PRO700 or PRO739 polypeptide is useful for detecting
CC PRO1559 polypeptide, and PRO1559 polypeptide is useful for detecting
CC PRO725, PRO700 or PRO739. PRO4993 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO337 polypeptide. The bioactive
CC molecule is the toxin, radiolabel, or an antibody. The bioactive molecule
CC causes death of the cell. PRO337 polypeptide is useful for linking a
CC bioactive molecule to a cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide are useful for linking a bioactive molecule

CC to a cell expressing PRO1559 polypeptide; and PRO1559 polypeptide is
CC useful for linking a bioactive molecule to a cell expressing PRO725,
CC PRO700 or PRO739 polypeptide. PRO4993 polypeptide or anti-PRO337
CC polypeptide is useful for modulating at least one biological activity of
CC the cell expressing PRO337 polypeptide, where the cell is killed. PRO337
CC polypeptide or anti-PRO4993 polypeptide is useful for modulating the
CC biological activity of the cell expressing PRO4993 polypeptide; PRO725,
CC PRO700 or PRO739 polypeptide or an anti-PRO1559 polypeptide is useful for
CC modulating the biological activity of the cell expressing PRO1559
CC polypeptide; and PRO1559 polypeptide or anti-PRO725, anti-PRO700 or anti-
CC PRO739 polypeptide is useful for modulating the biological activity of
CC the cell expressing PRO725, PRO700 or PRO739 polypeptide. The
CC polypeptides are useful for inhibiting tumour growth, retinal disorders,
CC sports-related joint problems, articular cartilage defects,
CC osteoarthritis or rheumatoid arthritis, wound healing and hearing loss in
CC mammals. The present sequence is a PCR primer used to isolate nucleic
CC acid encoding a PRO protein.
XX
SQ Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        149 GGAGGCCGGCTTCGACT 165
              ||||| || |||| |||
Db         17 GGAGGTCGACTTCCACT 1
```

RESULT 903
ADE89954/c
ID ADE89954 standard; DNA; 18 BP.
XX
AC ADE89954;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human PRO 298 PCR primer #3.
XX
KW Human; ss; PCR; secreted protein; transmembrane protein; PRO; cytostatic;
KW ophthalmological; antiarthritic; osteopathic; antirheumatic; vulnerary;
KW auditory; tumour growth; retinal disorder; sports-related joint problem;
KW articular cartilage defects; osteoarthritis; rheumatoid arthritis;
KW wound healing; hearing loss; primer.
XX
OS Homo sapiens.
XX
PN US2003130181-A1.
XX
PD 10-JUL-2003.
XX
PF 16-OCT-2001; 2001US-00978375.
XX
PR 17-OCT-1997; 97US-0062250P.
PR 03-NOV-1997; 97US-0064249P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066364P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077641P.
PR 11-MAR-1998; 98US-0077649P.
PR 12-MAR-1998; 98US-0077791P.
PR 13-MAR-1998; 98US-0078004P.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078910P.
PR 20-MAR-1998; 98US-0078936P.
PR 20-MAR-1998; 98US-0078939P.
PR 25-MAR-1998; 98US-0079294P.
PR 26-MAR-1998; 98US-0079656P.
PR 27-MAR-1998; 98US-0079663P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079689P.
PR 27-MAR-1998; 98US-0079728P.
PR 27-MAR-1998; 98US-0079786P.
PR 30-MAR-1998; 98US-0079920P.
PR 30-MAR-1998; 98US-0079923P.
PR 31-MAR-1998; 98US-0080105P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080165P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080328P.
PR 01-APR-1998; 98US-0080333P.
PR 01-APR-1998; 98US-0080334P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 08-APR-1998; 98US-0081071P.
PR 09-APR-1998; 98US-0081195P.
PR 09-APR-1998; 98US-0081203P.
PR 09-APR-1998; 98US-0081229P.
PR 15-APR-1998; 98US-0081817P.
PR 15-APR-1998; 98US-0081819P.
PR 15-APR-1998; 98US-0081838P.
PR 15-APR-1998; 98US-0081952P.
PR 15-APR-1998; 98US-0081955P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082700P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 22-APR-1998; 98US-0082804P.
PR 23-APR-1998; 98US-0082796P.
PR 27-APR-1998; 98US-0083336P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083392P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0083496P.
PR 29-APR-1998; 98US-0083499P.
PR 29-APR-1998; 98US-0083500P.
PR 29-APR-1998; 98US-0083545P.
PR 29-APR-1998; 98US-0083554P.
PR 29-APR-1998; 98US-0083558P.
PR 29-APR-1998; 98US-0083559P.
PR 30-APR-1998; 98US-0083742P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 06-MAY-1998; 98US-0084441P.
PR 07-MAY-1998; 98US-0084598P.
PR 07-MAY-1998; 98US-0084600P.
PR 07-MAY-1998; 98US-0084627P.
PR 07-MAY-1998; 98US-0084637P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 13-MAY-1998; 98US-0085323P.
PR 13-MAY-1998; 98US-0085338P.
PR 13-MAY-1998; 98US-0085339P.
PR 15-MAY-1998; 98US-0085573P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085689P.
PR 15-MAY-1998; 98US-0085697P.
PR 15-MAY-1998; 98US-0085700P.
PR 15-MAY-1998; 98US-0085704P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086414P.
PR 22-MAY-1998; 98US-0086430P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087106P.
PR 28-MAY-1998; 98US-0087208P.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.

PR 30-JUL-1998; 98US-0094651P.
PR 11-SEP-1998; 98US-0100038P.
PR 07-OCT-1998; 98WO-US021141.
PR 20-NOV-1998; 98US-0109304P.
PR 20-NOV-1998; 98WO-US024855.
PR 22-DEC-1998; 98US-0113296P.
PR 23-DEC-1998; 98US-0113621P.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 12-MAR-1999; 99US-0123957P.
PR 29-MAR-1999; 99US-0126773P.
PR 21-APR-1999; 99US-0130232P.
PR 26-APR-1999; 99US-0131022P.
PR 28-APR-1999; 99US-0131445P.
PR 14-MAY-1999; 99US-0134287P.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 16-JUN-1999; 99US-0139557P.
PR 23-JUN-1999; 99US-0141037P.
PR 07-JUL-1999; 99US-0142680P.
PR 26-JUL-1999; 99US-0145698P.
PR 28-JUL-1999; 99US-0146222P.
PR 29-OCT-1999; 99US-0162506P.
PR 30-NOV-1999; 99WO-US028313.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001WO-US009552.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 30-JUL-2001; 2001US-00918585.
XX
PA (ASHK/) ASHKENAZI A J.
PA (BAKE/) BAKER K P.
PA (BOTS/) BOTSTEIN D.
PA (DESN/) DESNOYERS L.
PA (EATO/) EATON D L.
PA (FERR/) FERRARA N.
PA (FILV/) FILVAROFF E.
PA (FONG/) FONG S.
PA (GAOW/) GAO W.
PA (GERB/) GERBER H.
PA (GERR/) GERRITSEN M E.
PA (GODD/) GODDARD A.
PA (GODO/) GODOWSKI P J.
PA (GIRM/) GIRMALDI J C.
PA (GURN/) GURNEY A L.
PA (HILL/) HILLAN K J.
PA (KLJA/) KLJAVIN I J.
PA (KUOS/) KUO S S.
PA (NAPI/) NAPIER M A.
PA (PANJ/) PAN J.
PA (PAON/) PAONI N F.
PA (ROYM/) ROY M A.
PA (SHEL/) SHELTON D L.
PA (STEW/) STEWART T A.
PA (TUMA/) TUMAS D.
PA (WILL/) WILLIAMS P M.
PA (WOOD/) WOOD W I.
XX

Query Match 2.9%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.7e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 149 GGAGGCCGGCTTCGACT 165
||||| || |||| |||
Db 17 GGAGGTCGACTTCCACT 1

RESULT 904
AAF27041
ID AAF27041 standard; DNA; 35 BP.
XX
AC AAF27041;
XX
DT 30-MAR-2001 (first entry)
XX
DE Human Sonic hedgehog (Shh) mutagenic primer, SEQ ID NO:45.
XX
KW Sonic hedgehog; Shh; polymer conjugate; polyalkene glycol group;
KW bioavailibility; formulation; neurological disorder;
KW inflammatory disorder; autoimmune disorder; cancer;
KW neurodegenerative disorder; Parkinson's disease; Huntington's disease;
KW Alzheimer's disease; neurological injury; stroke; multiple sclerosis;
KW malignant glioma; medulloblastoma; neuroectodermal tumour;
KW mutagenic primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200073337-A1.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US014741.
XX
PR 01-JUN-1999; 99US-0137011P.
PR 13-AUG-1999; 99US-0149016P.
XX
PA (BIOJ) BIOGEN INC.
XX
PI Pepinsky RB, Taylor F, Garber E;
XX
DR WPI; 2001-049927/06.
XX
PT Modified hedgehog protein, useful in the treatment of Parkinson's disease
PT and Huntington's chorea, comprises a polymer containing a polyalkylene
PT glycol group linked to any residue other than the N-terminal and lysine
PT residues.
XX
PS Example 6; Page 77; 157pp; English.
XX
CC The invention relates to novel polymer conjugates of hedgehog proteins
CC which have increased bioavailability. The hedgehog proteins are
CC conjugated to a non-naturally-occurring polymer comprising a polyalkylene
CC glycol group, with the proviso that the polymer is not conjugated to the
CC N-terminus, or to lysine residues of the hedgehog protein. The hedgehog
CC protein used in the conjugate may be a wild-type or mutant Sonic hedgehog
CC (Shh), Indian hedgehog (Ihh) or Desert hedgehog (Dhh) protein, or may be
CC a hedgehog fusion protein. The invention also relates to methods of

CC defining and mapping functionally important regions of a protein by
CC modifying accessible amino acid side chains, and determining the effect
CC the position and/or type of modification have on the activity of the
CC protein. The hedgehog polymer conjugates may be used in the management of
CC various medical conditions including various neurological disorders,
CC inflammatory and autoimmune diseases, and cancers. In particular, they
CC may be used to prevent preventing or ameliorate neurodegenerative
CC disorders (e.g., Parkinson's disease, Huntington's disease, Alzheimer's
CC disease); age-associated neurological disease; neurological injury and
CC trauma; immunological diseases of the nervous system (e.g., multiple
CC sclerosis); stroke; and malignant gliomas, medulloblastomas and
CC neuroectodermal tumours. The modifications made to the hedgehog protein
CC may result in increased half-life, altered tissue distribution (such as
CC an improved ability to stay in the vasculature for longer periods of
CC time), increased stability in solution, protection from proteolytic
CC degradation, or reduced immunogenicity. In particular, the ability to
CC remain in the vasculature for prolonged periods may allow a hedgehog
CC protein of the invention to cross the blood-brain barrier, and an
CC increased thermal stability would be an advantage when formulating the
CC hedgehog protein in powder form. The present sequence represents a human
CC Sonic hedgehog mutagenic primer used in an exemplification of the
CC invention
XX
SQ Sequence 35 BP; 8 A; 15 C; 9 G; 3 T; 0 U; 0 Other;

Query Match 2.9%; Score 12.2; DB 1; Length 35;
Best Local Similarity 68.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

```
Qy         36 GACGAAGATGGCCACCACTCAGAGG 60
              | |||||  |||| ||||    |||
Db         10 GTCGAAGCAGGCCTCCACCGCCAGG 34
```

RESULT 905
AAQ52964
ID AAQ52964 standard; RNA; 13 BP.
XX
AC AAQ52964;
XX
DT 25-MAR-2003 (revised)
DT 26-MAY-1994 (first entry)
XX
DE Herpes simplex virus target sequence 42.
XX
KW RNA; enzyme; enzymatic RNA molecule; ERM; cleave; RNA; mRNA; HnRNA;
KW picornavirus; HIV; immunodeficiency virus; hepatitis B virus; HBV;
KW papilloma virus; HPV; Epstein-Barr virus; EBV; TCLV;
KW T-cell leukaemia virus; hepatitis C virus; HCV; cytomegalovirus;
KW influenza virus; HSV; herpes simplex virus; vector; immune response;
KW antibody; ribozyme; viral RNA; treatment; ss.
XX
OS Synthetic.
XX
PN WO9323569-A1.
XX
PD 25-NOV-1993.
XX
PF 29-APR-1993; 93WO-US004020.
XX
PR 11-MAY-1992; 92US-00882689.
PR 14-MAY-1992; 92US-00882712.
PR 14-MAY-1992; 92US-00882713.
PR 14-MAY-1992; 92US-00882714.
PR 14-MAY-1992; 92US-00882823.
PR 14-MAY-1992; 92US-00882824.
PR 14-MAY-1992; 92US-00882886.
PR 14-MAY-1992; 92US-00882888.
PR 14-MAY-1992; 92US-00882889.
PR 14-MAY-1992; 92US-00882921.
PR 14-MAY-1992; 92US-00882922.
PR 14-MAY-1992; 92US-00883823.
PR 14-MAY-1992; 92US-00883849.
PR 14-MAY-1992; 92US-00884073.
PR 14-MAY-1992; 92US-00884074.
PR 14-MAY-1992; 92US-00884333.
PR 14-MAY-1992; 92US-00884422.
PR 14-MAY-1992; 92US-00884431.
PR 14-MAY-1992; 92US-00884436.
PR 14-MAY-1992; 92US-00884521.
PR 31-JUL-1992; 92US-00923738.
PR 26-AUG-1992; 92US-00935854.
PR 26-AUG-1992; 92US-00936086.
PR 18-SEP-1992; 92US-00948359.
PR 15-OCT-1992; 92US-00963322.
PR 07-DEC-1992; 92US-00987129.
PR 07-DEC-1992; 92US-00987130.
PR 07-DEC-1992; 92US-00987133.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Draper KG, Dudycz LW, Mcswiggen JA, Macejak DG, Holecek JJ;
PI Mamone JA;
XX
DR WPI; 1993-386599/48.
XX
PT Enzymatic RNA molecules - used to inhibit viral replication, infection
PT and gene expression.
XX
PS Claim 5; Fig 15; 287pp; English.
XX
CC The sequences (AAQ52923-Q53037) are pref. herpes simplex virus target
CC sequences for enzymatic RNA molecules. The RNA molecules are
CC complementary to a substrate binding region in the specified gene target.
CC They also have enzymatic activity, in that they specifically cleave RNA
CC in the target. The ERMs interfere with viral replication and therefore
CC have anti-viral properties. They can be used to attenuate viruses to be
CC used in vaccines. (Updated on 25-MAR-2003 to correct PN field.) (Updated
CC on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct
CC PI field.)
XX
SQ Sequence 13 BP; 4 A; 3 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 2.6e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```
Qy         32 CTGGGACGAAGA 43
              |:||||||||||
Db          1 CUGGGACGAAGA 12
```

RESULT 906
AAX31516/c
ID AAX31516 standard; DNA; 15 BP.
XX
AC AAX31516;
XX
DT 21-MAY-1999 (first entry)
XX
DE Tag sequence of a transcript increased in pancreatic cancer.
XX
KW Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
KW diagnosis; prognosis; treatment; ss.
XX
OS Homo sapiens.
XX
PN WO9853319-A2.
XX
PD 26-NOV-1998.
XX
PF 20-MAY-1998; 98WO-US010277.
XX
PR 21-MAY-1997; 97US-0047352P.
XX
PA (UYJO) UNIV JOHNS HOPKINS.

```
XX
PI   Vogelstein B,  Kinzler KW;
XX
DR   WPI; 1999-070161/06.
XX
PT   Use of isolated gene transcripts - useful for developing products for the
PT   diagnosis, prognosis and treatment of cancers, particularly colon and
PT   pancreatic cancer.
XX
PS   Claim 13; Page 57; 120pp; English.
XX
CC   AAX30947-31815 represent tag sequences of transcripts that are
CC   differentially expressed in colorectal cancer, in pancreatic cancer, or
CC   in both. The tag sequences can be used to identify genes by matching the
CC   tag to a gen data base member, or by using the tag sequences as probes to
CC   isolate unidentified genes from cDNA libraries. The tag sequences can
CC   also be used in a method for diagnosing colon or pancreatic cancer in a
CC   sample suspected of being neoplastic. The method comprises comparing the
CC   level of at least one transcript in a first sample of a tissue to a
CC   second sample, where the first sample is a colonic tissue suspected of
CC   being neoplastic and the second sample is a normal human colonic tissue.
CC   The transcript is identified by a tag selected from AAX30947-31815. The
CC   methods of the invention can be used in the diagnosis, prognosis and
CC   treatment of cancer
XX
SQ   Sequence 15 BP; 3 A; 2 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         92 CATCACCACGTC 103
              ||||||||||||
Db         15 CATCACCACGTC 4


RESULT 907
AAF48829
ID   AAF48829 standard; DNA; 15 BP.
XX
AC   AAF48829;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #2249.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 58; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 6 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        394 CCAAGAAGGTCT 405
              ||||||||||||
Db          4 CCAAGAAGGTCT 15


RESULT 908
AAF48832
ID   AAF48832 standard; DNA; 15 BP.
XX
AC   AAF48832;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #2252.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 58; 201pp; English.
```

```
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 4 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        394 CCAAGAAGGTCT 405
              ||||||||||||
Db          1 CCAAGAAGGTCT 12


RESULT 909
AAF48830
ID   AAF48830 standard; DNA; 15 BP.
XX
AC   AAF48830;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #2250.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 58; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 5 A; 4 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        394 CCAAGAAGGTCT 405
              ||||||||||||
Db          3 CCAAGAAGGTCT 14


RESULT 910
AAF48831
ID   AAF48831 standard; DNA; 15 BP.
XX
AC   AAF48831;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #2251.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 58; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
```

CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 4 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 3.5e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 394 CCAAGAAGGTCT 405
||||||||||||
Db 2 CCAAGAAGGTCT 13

RESULT 911
AAS99932
ID AAS99932 standard; DNA; 15 BP.
XX
AC AAS99932;
XX
DT 12-MAR-2002 (first entry)
XX
DE Even-skipped homeobox 1 (EVX1) gene allele-specific oligonucleotide #9.
XX
KW Even-skipped homeo box 1; EVX1; neurological disease; drug screening;
KW haplotyping; single nucleotide polymorphism; SNP; human; ss;
KW allele-specific oligonucleotide.
XX
OS Homo sapiens.
XX
PN WO200190120-A2.
XX
PD 29-NOV-2001.
XX
PF 21-MAY-2001; 2001WO-US016559.
XX
PR 19-MAY-2000; 2000US-0205437P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Duda A, Kliem SE, Kumar AM;
XX
DR WPI; 2002-089913/12.
XX
PT Novel genetic variants of even-skipped homeo box 1, EVX1 gene useful for
PT therapeutic purposes and for expressing EVX1 protein useful in
PT identifying drugs to treat neurological diseases.
XX
PS Claim 16; Page 13; 69pp; English.
XX
CC The invention relates to an isolated polynucleotide (I), comprising a
CC nucleotide sequence which is a polymorphic variant of a reference
CC sequence for the even-skipped homeo box 1 (homologue of Drosophila)
CC (EVX1) gene or its fragment, or a polymorphic variant of a reference
CC sequence for a EVX1 cDNA or its fragment. EVX1 polypeptide (II) is useful
CC for screening for drugs targeting the polypeptide, by contacting the EVX1
CC polymorphic variant with a candidate agent and assaying for binding
CC activity. A method is described for identifying an association between a
CC trait such as a clinical response to a drug targeting EVX1 and a
CC haplotype or haplotype pair of EVX1 gene. The methods are useful in
CC developing diagnostic tests and therapeutic treatments for neurological
CC diseases. (I) is useful for studying the expression and function of EVX1
CC and expressing EVX1 protein for use in screening for candidate drugs to
CC treat diseases related to EVX1 activity. The polymorphism and haplotype
CC data are useful for validating whether EVX1 is a suitable target for
CC drugs to treat neurological diseases, screening for such drugs and
CC reducing bias in clinical trials of such drugs. (I) is useful for
CC therapeutic purposes. (I) is useful for determining if an individual has
CC one of the haplotypes 1-4 or the haplotype pairs. Establishing the EVX1
CC haplotype or haplotype pair of an individual is useful for improving the
CC efficiency and reliability of several steps in the discovery and
CC development of drugs for treating diseases associated with EVX1 activity
CC e.g. neurological diseases. The haplotyping method is useful to validate
CC EVX1 as a candidate target for treating a specific condition or disease
CC predicted to be associated with EVX1 activity. (I) is useful for studying
CC expression of the EVX1 isogenes in vivo, for in vivo screening and
CC testing of drugs against EVX1 protein and for testing the efficacy of
CC therapeutic agents and compounds for neurological diseases in a
CC biological system. Antibody raised against (II) is useful for diagnostic
CC and prognostic formats and therapeutic methods, for immunoprecipitating
CC (II) from solution, for detecting EVX1 protein isoforms in biological
CC samples, frozen tissue sections, cells which have been fixed or unfixed
CC and prepared on slides, for use in immunocytochemical,
CC immunohistochemical and immunofluorescence techniques. AAS99924-AAS99958
CC represent human EVX1 gene allele-specific oligonucleotides of the
CC invention
XX
SQ Sequence 15 BP; 2 A; 6 C; 6 G; 0 T; 0 U; 1 Other;

Query Match 2.8%; Score 12; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 3.5e+02;
Matches 12; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 106 ACCGCGACCGCAGC 119
||||||||||| |:
Db 1 ACCGCGACCGCGGY 14

RESULT 912
ABK70537
ID ABK70537 standard; DNA; 15 BP.
XX
AC ABK70537;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human G protein-coupled receptor 7 allele-specific probe #21.
XX
KW Human; G protein-coupled receptor 7; GPR7; haplotyping; SNP;
KW psychological disorder; neurological disorder; probe; ss;
KW single nucleotide polymorphism.
XX
OS Homo sapiens.
XX
PN WO200222644-A1.
XX
PD 21-MAR-2002.
XX
PF 17-SEP-2001; 2001WO-US029207.
XX
PR 15-SEP-2000; 2000US-0232900P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Koshy B, Sanchis A, Tirrell C;
XX
DR WPI; 2002-383121/41.
XX
PT Novel genetic variants of G protein-coupled receptor 7 gene useful for
PT therapeutic purposes and for expressing GPR7 protein useful in
PT identifying drugs to treat psychological and neurological disorders.
XX
PS Claim 16; Page 13; 69pp; English.
XX
CC The invention relates to an isolated polynucleotide (I) comprising a
CC nucleotide sequence which is a polymorphic variant of a reference
CC sequence for G-protein coupled receptor 7 (GPR7) gene or its fragment, or
CC a polymorphic variant of a reference sequence for a GPR7 cDNA or its
CC fragment. The encoded polypeptide (II) is useful for screening for drugs
CC targeting the polypeptide. (I) is useful for identifying an association

```
CC   between a trait such as a clinical response to a drug targeting GPR7 and
CC   a haplotype or haplotype pair of GPR7 gene. Such methods have
CC   applicability in developing diagnostic tests and therapeutic treatments
CC   psychological and neurological disorders. (I) is useful for studying the
CC   expression and function of GPR7 and expressing GPR7 protein for use in
CC   screening for candidate drugs to treat diseases related to GPR7 activity.
CC   The polymorphism and haplotype data are useful for validating whether
CC   GPR7 is a suitable target for drugs to treat psychological and
CC   neurological disorders, screening for such drugs and reducing bias in
CC   clinical trials of such drugs. (I) is useful for therapeutic purposes.
CC   Establishing the GPR7 haplotype or haplotype pair of an individual is
CC   useful for improving the efficiency and reliability of several steps in
CC   the discovery and development of drugs for treating diseases associated
CC   with GPR7 activity psychological and neurological disorders. The
CC   haplotyping method is useful to validate GPR7 as a candidate target for
CC   treating a specific condition or disease predicted to be associated with
CC   GPR7 activity. The method is also useful in screening for compounds
CC   targeting GPR7 to treat a specific condition or disease predicted to be
CC   associated with GPR7 activity, e.g. detecting which of the GPR7
CC   haplotypes or haplotype pairs present in individual members of a
CC   population with the specific disease of interest enables one to screen
CC   for compounds that display the highest desired agonist or antagonist
CC   activity for each of the most frequent GPR7 isoforms present in the
CC   disease population. A polymorphic variant of GPR7 is useful in studying
CC   the effect of the variation on the biological activity of GPR7, on the
CC   binding affinity of candidate drugs targeting GPR7 for the treatment of
CC   psychological and neurological disorders and in assays to measure the
CC   binding affinities of one or more candidate drugs targeting the GPR7
CC   protein. (I) is useful for studying expression of the GPR7 isogenes in
CC   vivo, for in vivo screening and testing of drugs against GPR7 protein and
CC   for testing the efficacy of therapeutic agents and compounds for
CC   psychological and neurological disorders in a biological system. Antibody
CC   to (II) is useful for diagnostic and prognostic formats and therapeutic
CC   methods, for immunoprecipitating (II) from solution, for detecting GPR7
CC   protein isoforms in biological samples, frozen tissue sections, cells
CC   which have been fixed or unfixed and prepared on slides, for use in
CC   immunocytochemical, immunohistochemical and immunofluorescence
CC   techniques. ABK70517-ABK70558 represent human GPR7 allele-specific probes
CC   and primers used in haplotyping of human GPR7 as described in the
CC   invention
XX
SQ   Sequence 15 BP; 3 A; 4 C; 7 G; 0 T; 0 U; 1 Other;

  Query Match              2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        333 GACGACCAGGGCCG 346
              ||||| |||||||:|
Db          2 GACGAGCAGGGCSG 15


RESULT 913
ABN80596/c
ID   ABN80596 standard; DNA; 15 BP.
XX
AC   ABN80596;
XX
DT   19-JUL-2002  (first entry)
XX
DE   Human P450(cytochrome) oxidoreductase allele specific PCR primer #36.
XX
KW   Human; P450(cytochrome) oxidoreductase; POR; cancer; haplotype; SNP;
KW   single nucleotide polymorphism; flavoprotein; enzyme; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200226768-A2.
XX
PD   04-APR-2002.
XX
PF   01-OCT-2001; 2001WO-US030877.
XX
PR   29-SEP-2000; 2000US-0236449P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Kazemi A,  Kliem SE,  Lanz EM,  Messer C,  Tanguay DA;
XX
DR   WPI; 2002-394236/42.
XX
PT   New genetic variants comprising haplotypes of the P450 (cytochrome)
PT   oxidoreductase (POR) isogene, useful in improving the efficiency of drug
PT   screening protocols for compounds targeting POR.
XX
PS   Claim 14; Page 15; 141pp; English.
XX
CC   The present invention provides the protein, gene and cDNA sequences of
CC   human P450(cytochrome) oxidoreductase POR, and single nucleotide
CC   polymorphisms (SNPs) identified therein. The sequences can be used to
CC   haplotype the POR gene of an individual, and to establish whether POR is
CC   a suitable target for drugs to treat cancer and disorders associated with
CC   impaired protein synthesis in cells. The present sequence is an allele
CC   specific primer for the coding sequences of the invention
XX
SQ   Sequence 15 BP; 2 A; 9 C; 2 G; 1 T; 0 U; 1 Other;

  Query Match              2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        139 GCCTGGCGGTGGAG 152
              |:|||||||||||
Db         15 GYGTGGCGGTGGAG 2


RESULT 914
ABN87913/c
ID   ABN87913 standard; DNA; 15 BP.
XX
AC   ABN87913;
XX
DT   12-AUG-2002  (first entry)
XX
DE   Human GSR allele specific oligonucleotide primer SEQ ID NO:32.
XX
KW   Human; glutathione reductase; GSR; enzyme; haemolytic anaemia; SNP;
KW   gene therapy; antianaemic; polymorphic; single nucleotide polymorphism;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    14
FT                   /*tag=  a
FT                   /note= "polymorphic base"
XX
PN   WO200242320-A2.
XX
PD   30-MAY-2002.
XX
PF   13-NOV-2001; 2001WO-US046473.
XX
PR   10-NOV-2000; 2000US-0247202P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Bieglecki KM,  Sanchis A,  Sausker EA,  Sun X;
XX
DR   WPI; 2002-471719/50.
XX
PT   New genetic variants of Glutathione reductase isogenes, useful for
PT   improving efficiency and reliability in drug development for treating
PT   hemolytic anemia.
XX
PS   Claim 14; Page 14; 137pp; English.
```

```
XX
CC   The present invention describes genetic variants of the human glutathione
CC   reductase (GSR) gene (I). (I) has antianaemic activity and can be used in
CC   gene therapy. (I) can be used in screening for drugs targeting (I) that
CC   are useful for treating haemolytic anaemia. Methods from the present
CC   invention can be used: for improving the efficiency and reliability of
CC   several steps in the discovery and development of drugs for treating
CC   diseases associated with GSR activity; for haplotyping, which is also
CC   used by the pharmaceutical research scientist to validate GSR as a
CC   candidate target for treating a specific condition or disease predicted
CC   to be associated with GSR activity, e.g. haemolytic anaemia, and in the
CC   design of clinical trials for treating a specific condition of disease
CC   associated with GSR activity; and for screening compounds targeting GSR.
CC   (I) is useful in studying the expression and function of GSR, and in
CC   expressing GSR protein for use in screening for candidate drugs to treat
CC   diseases related to GSR activity. (I) is also useful in studying the
CC   effect of the variation on the biological activity of GSR as well as on
CC   the binding affinity of candidate drugs targeting GSR for the treatment
CC   of haemolytic anaemia. The present sequence represents an allele specific
CC   oligonucleotide (ASO) primer for the human GSR gene, which is given in
CC   the exemplification of the present invention. N.B. The polymorphic base
CC   (showing a single nucleotide polymorphism) in the ASO primer is shown
CC   using an IUPAC ambiguity code (as given in the present invention)
XX
SQ   Sequence 15 BP; 1 A; 8 C; 4 G; 1 T; 0 U; 1 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        320 CGTGCTGGCGGCGG 333
              :| ||||||||||||
Db         14 MGAGCTGGCGGCGG 1


RESULT 915
ABL51980
ID   ABL51980 standard; DNA; 15 BP.
XX
AC   ABL51980;
XX
DT   11-JUL-2002  (first entry)
XX
DE   Human SLC18A2 allele specific oligonucleotide primer SEQ ID NO:28.
XX
KW   Human; solute carrier family 18 member 2; SLC18A2; vesicular monoamine;
KW   vesicular monoamine transporter; VMAT2; polymorphic site; SNP;
KW   single nucleotide polymorphism; antiinflammatory; neuroleptic;
KW   haplotyping; genotyping; respiratory inflammatory disease;
KW   neuropsychiatric disorder; monoaminergic brain system; primer; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    14
FT                   /*tag=  a
FT                   /note= "polymorphic site indicated by an ambiguity base"
XX
PN   WO200222652-A2.
XX
PD   21-MAR-2002.
XX
PF   17-SEP-2001; 2001WO-US042217.
XX
PR   15-SEP-2000; 2000US-0232895P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Anastasio AE,  Han J,  Kliem SE,  Sausker EA;
XX
DR   WPI; 2002-393942/42.
XX
PT   Novel genetic variants of soluble carrier family 18 (vesicular
PT   monoamine), member 2 gene useful for screening drugs to treat diseases
PT   e.g. neuropsychiatric disorders involving monoaminergic brain systems.
XX
PS   Claim 17; Page 14; 183pp; English.
XX
CC   The present invention describes an isolated polynucleotide (I) having a
CC   sequence (S1) comprising soluble carrier family 18 (vesicular monoamine),
CC   member 2 (SLC18A2) isogene selected from 49 isogenes with regions of a
CC   sequence (SS) of 40023 bp (see ABL51954), and defined by a corresponding
CC   set of polymorphisms whose locations and identities are given in the
CC   specification; or a sequence (S2) complementary to (S1). (I) has
CC   antiinflammatory and neuroleptic activities, and can be used in gene
CC   therapy. Methods from the present invention can be used for haplotyping
CC   and genotyping the SLC18A2 gene in an individual. SLC18A2 is also known
CC   as the vesicular monoamine transporter (VMAT2). (I) is useful in studying
CC   the expression and function of SLC18A2, and in expressing the SLC18A2
CC   protein for use in screening for candidate drugs to treat diseases
CC   related to SLC18A2 activity and in studying the effect of the variation
CC   on the biological activity of SLC18A2 as well as on the binding affinity
CC   of candidate drugs targeting SLC18A2 for the treatment of respiratory
CC   inflammatory diseases such as neuropsychiatric disorders involving
CC   monoaminergic brain systems. The present sequence represents an allele
CC   specific oligonucleotide (ASO) primer for human SLC18A2, which is given
CC   in the present invention
XX
SQ   Sequence 15 BP; 2 A; 7 C; 5 G; 0 T; 0 U; 1 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        106 ACCGCGACCGCAGC 119
              |||||| ||||||:
Db          1 ACCGCGCCCGCAGY 14


RESULT 916
AAS19726/c
ID   AAS19726 standard; DNA; 15 BP.
XX
AC   AAS19726;
XX
DT   08-MAY-2002  (first entry)
XX
DE   ASO probe #23 to detect human RANGAP1 gene polymorphisms.
XX
KW   Human; single nucleotide polymorphism; SNP; RANGAP1;
KW   haplotyping chromosome 22q13.2-q13.31; Ran GTPase activating protein 1;
KW   genotyping; cancer; irregular cell cycle associated disorder; ASO; probe;
KW   ss; allele-specific oligonucleotide.
XX
OS   Homo sapiens.
XX
PN   WO200179240-A2.
XX
PD   25-OCT-2001.
XX
PF   17-APR-2001; 2001WO-US012455.
XX
PR   17-APR-2000; 2000US-0198072P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Choi JY,  Koshy B;
XX
DR   WPI; 2002-075068/10.
XX
PT   Genotyping human Ran GTPase activating protein 1 gene of individual for
PT   determining haplotype of individual, involves determining identity of
PT   nucleotide pair at specific polymorphic sites for two copies of the gene.
XX
PS   Claim 15; Page 14; 148pp; English.
XX
```

```
CC   The present invention relates to novel single nucleotide polymorphisms
CC   (SNPs) in the human Ran GTPase activating protein 1 (RANGAP1) gene
CC   located on chromosome 22q13.2-q13.31, and methods for haplotyping and/or
CC   genotyping the RANGAP1 gene. The methods of the invention make use of
CC   allele-specific oligonucleotides (ASOs) as probes and primers and/or
CC   primer-extension oligonucleotides for detecting the RANGAP1 gene
CC   polymorphisms. The polynucleotides and screened compounds are useful for
CC   treatment of diseases associated with RANGAP1 activity, such as cancer
CC   and other disorders associated with an irregular cell cycle. AAS19704-
CC   AAS19742 represent ASO probes for detecting human RANGAP1 gene
CC   polymorphisms
XX
SQ   Sequence 15 BP; 2 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

  Query Match              2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         56 AGAGGAGTCTCTGC 69
              |||||||:| ||||
Db         15 AGAGGAGYCCCTGC 2


RESULT 917
AAS97315/c
ID   AAS97315 standard; DNA; 15 BP.
XX
AC   AAS97315;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human CRYBB1 gene ASO probe #10.
XX
KW   Human; crystallin beta B1; CRYBB1; chromosome 22q12.1; ophthalmalogical;
KW   cataract; allele specific oligonucleotide; ASO; probe; ss; haplotype;
KW   genotyping; transgenic animal.
XX
OS   Homo sapiens.
XX
PN   WO200185998-A1.
XX
PD   15-NOV-2001.
XX
PF   07-MAY-2001; 2001WO-US014715.
XX
PR   05-MAY-2000; 2000US-0202253P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Choi JY,  Kazemi A,  Kliem SE,  Koshy B,  Rounds E;
XX
DR   WPI; 2002-062253/08.
XX
PT   Novel polymorphic variants of crystallin, beta B1 useful in studying
PT   expression and function of the protein, useful for screening candidate
PT   drugs to treat diseases e.g. cataract.
XX
PS   Claim 15; Page 12; 94pp; English.
XX
CC   The invention relates to an isolated polynucleotide comprising a sequence
CC   which is a polymorphic variant of a reference sequence for crystallin,
CC   beta B1 (CRYBB1, located on chromosome 22q12.1) gene or their fragment,
CC   where the polymorphic variant comprises a CRYBB1 isogene defined by a
CC   haplotype from haplotypes 1-16 as given in the specification. Also
CC   included are a transgenic non-human animal transformed or transfected
CC   with the polymorphic variant, a computer system for storing and analysing
CC   polymorphism data for CRYBB1 gene, a genome anthology for the CRYBB1 gene
CC   which comprises the defined CRYBB1 isogenes, methods of determining an
CC   individuals haplotype or genotype as well as methods of determining the
CC   association of a particular haplotype with a disease or trait and a
CC   composition comprising at least one genotyping oligonucleotide
CC   (especially allele-specific oligonucleotides (ASO)) for detecting a
CC   polymorphism in the CRYBB1. The isogenes or haplotypes are useful for
CC   improving the efficiency and reliability of several steps in the
CC   discovery and development of drugs for treating diseases associated with
CC   CRYBB1 activity, e.g. cataract. and can also be used by the
CC   pharmaceutical research scientist to validate CRYBB1 as a candidate
CC   target for, and in design of clinical trials of candidate drugs for,
CC   treating a specific condition drugs or disease predicted to be associated
CC   with CRYBB1 activity. The ASOs are useful as probes and primers, and for
CC   assaying a polymorphism in the target region. The present sequence is an
CC   ASO probe for CRYBB1
XX
SQ   Sequence 15 BP; 3 A; 3 C; 8 G; 0 T; 0 U; 1 Other;

  Query Match              2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        132 CTGGCCCGCCTGGC 145
              ||| |||:||||||
Db         15 CTGCCCCRCCTGGC 2


RESULT 918
AAL46088/c
ID   AAL46088 standard; DNA; 15 BP.
XX
AC   AAL46088;
XX
DT   11-JUL-2002  (first entry)
XX
DE   Human pro-platelet basic protein DNA allele-specific probe #4.
XX
KW   Human; pro-platelet basic protein; PPBP; metabolic disorder;
KW   immunological disorder; SNP; single nucleotide polymorphism;
KW   immunomodulator; chromosome 4q12-13; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200229114-A1.
XX
PD   11-APR-2002.
XX
PF   09-OCT-2001; 2001WO-US031509.
XX
PR   06-OCT-2000; 2000US-0238692P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Choi JY,  Russo DP;
XX
DR   WPI; 2002-394352/42.
XX
PT   New Pro-Platelet Basic Protein (PPBP) gene polymorphic variants, useful
PT   for studying the expression and function of PPBP and screening candidate
PT   drugs for treating disorders associated with PPBP activity, e.g.
PT   immunological disorders.
XX
PS   Claim 14; Page 12; 68pp; English.
XX
CC   The present invention provides the protein, cDNA and genomic sequences of
CC   human pro-platelet basic protein (PPBP) and single nucleotide
CC   polymorphisms (SNPs) identified therein. The polymorphic variants are
CC   useful in studying the expression and function of PPBP, in expressing
CC   PPBP protein for use in screening for candidate drugs to treat diseases
CC   related to PPBP activity, in studying the effect of the variation on the
CC   biological activity of PPBP, and the binding affinity of candidate drugs
CC   targeting PPBP for the treatment of disorders associated with PPBP
CC   activity, e.g. metabolic and immunological disorders. The present
CC   sequence is an allele specific probe for the gene of the invention
XX
SQ   Sequence 15 BP; 2 A; 4 C; 5 G; 3 T; 0 U; 1 Other;

  Query Match              2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 3.5e+02;
```

```
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        282 GGCACCAAGCTGGT 295
              ||||||:||| ||
Db         15 GGCACCARGCTAGT 2


RESULT 919
ABK32470/c
ID   ABK32470 standard; DNA; 15 BP.
XX
AC   ABK32470;
XX
DT   23-APR-2002  (first entry)
XX
DE   Human pancreatic cancer SAGE tag #22.
XX
KW   Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
KW   serial analysis of gene expression; diagnostic; prognostic; probe;
KW   cancer marker; ss.
XX
OS   Homo sapiens.
XX
PN   US6333152-B1.
XX
PD   25-DEC-2001.
XX
PF   20-MAY-1998;   98US-00081646.
XX
PR   20-MAY-1998;   98US-00081646.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Vogelstein B,  Kinzler KW,  Zhang L,  Zhou W;
XX
DR   WPI; 2002-153821/20.
XX
PT   New human nucleic acid containing specific SAGE tags, useful as
PT   diagnostic markers for cancer, also derived probes.
XX
PS   Disclosure; Col 65; 161pp; English.
XX
CC   The invention relates to an isolated, purified human nucleic acid (I)
CC   that has the same sequence as a mRNA found in humans and is a SAGE
CC   (serial analysis of gene expression) tag comprising a single stranded
CC   probe containing at least 10 consecutive nucleotides. SAGE tags, are
CC   diagnostic and prognostic markers of cancer, especially of the colon and
CC   pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer
CC   SAGE tags of the invention
XX
SQ   Sequence 15 BP; 3 A; 2 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         92 CATCACCACGTC 103
              ||||||||||||
Db         15 CATCACCACGTC 4


RESULT 920
AAQ21895
ID   AAQ21895 standard; DNA; 16 BP.
XX
AC   AAQ21895;
XX
DT   11-JUN-1992  (first entry)
XX
DE   TEG-terminated exonuclease stable oligonucleotide #9.
XX
KW   tetraethylene glycol; cancer; antisense; gene expression; inhibition;
KW   diol; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "see comments"
FT   modified_base   15
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "see comments"
XX
PN   WO9202534-A.
XX
PD   20-FEB-1992.
XX
PF   03-AUG-1990;   90US-00562180.
XX
PR   03-AUG-1990;   90US-00562180.
PR   13-SEP-1990;   90US-00582287.
PR   13-SEP-1990;   90US-00582456.
PR   13-SEP-1990;   90US-00582457.
PR   09-APR-1991;   91US-00682784.
XX
PA   (STER ) STERLING DRUG INC.
XX
PI   Weis AL,  Hausheer FH,  Chaturvedu PVC,  Delecki DJ,  Cavanaugh PF;
PI   Moskwa PS,  Oakes FT;
XX
DR   WPI; 1992-080016/10.
XX
PT   New oligo nucleoside(s) and nucleotide(s) with up to 200 bases - nuclease
PT   resistant anti sense cpds. useful for treating hereditary disorders of
PT   altered genetic expression mechanisms.
XX
PS   Example 42; Page 70; 90pp; English.
XX
CC   Two TEG molecules joined via a phosphate group are attached to the 5'
CC   terminus. The guanosine residue at position 15 is attached to the 3'
CC   adenosine residue by two TEG molecules which are joined via a phosphate
CC   group. The diol-contg. linking group forms phosphodiester bonds with G
CC   and A. The resulting oligonucleotide is resistant to exonuclease
CC   degradation. See also AAQ21884-Q21894 and AAQ21896-Q21918
XX
SQ   Sequence 16 BP; 2 A; 3 C; 9 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        235 CGGGAGGCTGCT 246
              ||||||||||||
Db          2 CGGGAGGCTGCT 13


RESULT 921
AAX62954/c
ID   AAX62954 standard; RNA; 17 BP.
XX
AC   AAX62954;
XX
DT   16-JUL-1999  (first entry)
XX
DE   Delta-9 desaturase hamerhead ribozyme target SEQ ID NO:829.
XX
KW   Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;
KW   granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme;
KW   modulation; gene expression; transgenic plant; cleavage; canola plant;
KW   caffeine synthesis; coffee plant; nicotine production; tobacco;
KW   fruit ripening; flower pigmentation; lignin production; ss.
XX
OS   Zea mays.
```

XX
PN WO9710328-A2.
XX
PD 20-MAR-1997.
XX
PF 12-JUL-1996; 96WO-US011689.
XX
PR 13-JUL-1995; 95US-0001135P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (DOWC) DOWELANCO.
XX
PI Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;
PI Young SA, Folkerts O, Merlo DJ;
XX
DR WPI; 1997-202224/18.
XX
PT Ribozyme which modulates plant gene expression - preferably modulates
PT expression of DELTA-9 desaturase or granule bound starch synthase in
PT maize or canola.
XX
PS Claim 38; Page 86; 155pp; English.
XX
CC The present invention describes an enzymatic nucleic acid molecule (I)
CC with RNA cleaving activity, which modulates the expression of a plant
CC gene. Also described is a gene comprising a cDNA sequence encoding maize
CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,
CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)
CC gene, in a plant (preferably a maize or canola plant). (I) can be used to
CC modulate caffeine synthesis in a coffee plant, nicotine production in a
CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
CC marigold plant or lignin production in a tobacco, aspen, poplar or pine
CC plant
XX
SQ Sequence 17 BP; 2 A; 5 C; 3 G; 0 T; 7 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 120 AAGTACGGCATG 131
||||||||||||
Db 12 AAGTACGGCATG 1

RESULT 922
AAV92424/c
ID AAV92424 standard; RNA; 17 BP.
XX
AC AAV92424;
XX
DT 18-FEB-1999 (first entry)
XX
DE Human A-Raf substrate position 511.
XX
KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KW screening; identification; synthesis; deprotection; purification; cancer;
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KW restenosis; rheumatoid arthritis; ss.
XX
OS Homo sapiens.
XX
PN WO9850530-A2.
XX
PD 12-NOV-1998.
XX
PF 05-MAY-1998; 98WO-US009249.
XX
PR 09-MAY-1997; 97US-0046059P.
PR 09-JUN-1997; 97US-0049002P.
PR 03-JUL-1997; 97US-0051718P.
PR 22-AUG-1997; 97US-0056808P.
PR 02-OCT-1997; 97US-0061321P.
PR 02-OCT-1997; 97US-0061324P.
PR 05-NOV-1997; 97US-0064866P.
PR 19-DEC-1997; 97US-0068212P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
PI Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;
PI Thompson J, Workman CT, Beaudry A, Sweedler D;
XX
DR WPI; 1999-009494/01.
XX
PT Identifying new catalytic nucleic acid that modulates selected processes
PT - especially ribozymes that cleave Raf RNA for treating cancer,
PT restenosis, and also new ribozymes and modified nucleoside triphosphates
PT used as antiviral agents and synthons.
XX
PS Claim 177; Page 157; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules with
CC endonuclease activity and catalytic activity, from the present invention,
CC are used to modulate gene expression in plant and mammalian cells and to
CC cleave target nucleic acid, particularly for treating systemic diseases
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC ascites and infection. They may also be used to detect genetic drift and
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC with RNA-cleaving activity that modulate expression of the Raf gene, are
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC generally any condition associated with the level of c-raf. Introduction
CC of sugar/phosphate modifications increases stability against nuclease and
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
CC method, specifically for modulating the expression of a Raf gene
XX
SQ Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 396 AAGAAGGTCTTC 407
||||||||||||
Db 12 AAGAAGGTCTTC 1

RESULT 923
ABN01021
ID ABN01021 standard; DNA; 17 BP.
XX
AC ABN01021;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1013.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.

```
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 1013; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 8 A; 1 C; 8 G; 0 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 4.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        206 GAAAGCAGAGAA 217
              ||||||||||||
Db          2 GAAAGCAGAGAA 13


RESULT 924
ABK17447/c
ID   ABK17447 standard; RNA; 17 BP.
XX
AC   ABK17447;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG hammerhead ribozyme target sequence, Seq ID No 94.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US015866.
XX
PR   16-MAY-2000; 2000US-00572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related gene,
PT   useful for treating cancer, diabetic retinopathy, macular degeneration,
PT   arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS   Claim 4; Page 60; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention
XX
SQ   Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 4.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         56 AGAGGAGTCTCT 67
              ||||||||||||
Db         13 AGAGGAGTCTCT 2


RESULT 925
ABK18041/c
ID   ABK18041 standard; RNA; 17 BP.
```

XX
AC ABK18041;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG hammerhead ribozyme target sequence, Seq ID No 688.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US015866.
XX
PR 16-MAY-2000; 2000US-00572021.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Mclaughlin F, Randi AM;
XX
DR WPI; 2002-082995/11.
XX
PT Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS Claim 4; Page 71; 149pp; English.
XX
CC The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention
XX
SQ Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 56 AGAGGAGTCTCT 67
||||||||||||
Db 14 AGAGGAGTCTCT 3

RESULT 926
ABK18042/c
ID ABK18042 standard; RNA; 17 BP.
XX
AC ABK18042;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG hammerhead ribozyme target sequence, Seq ID No 689.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US015866.
XX
PR 16-MAY-2000; 2000US-00572021.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Mclaughlin F, Randi AM;
XX
DR WPI; 2002-082995/11.
XX
PT Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS Claim 4; Page 71; 149pp; English.
XX
CC The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention
XX

```
SQ   Sequence 17 BP; 4 A; 7 C; 2 G; 0 T; 4 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 4.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         56 AGAGGAGTCTCT 67
              ||||||||||||
Db         12 AGAGGAGTCTCT 1


RESULT 927
ABK18967/c
ID   ABK18967 standard; RNA; 17 BP.
XX
AC   ABK18967;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG DNAzyme target sequence Seq ID No 1614.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US015866.
XX
PR   16-MAY-2000; 2000US-00572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related gene,
PT   useful for treating cancer, diabetic retinopathy, macular degeneration,
PT   arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS   Claim 4; Page 106; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 4.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         56 AGAGGAGTCTCT 67
              ||||||||||||
Db         16 AGAGGAGTCTCT 5


RESULT 928
ABK19225/c
ID   ABK19225 standard; RNA; 17 BP.
XX
AC   ABK19225;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG Amberzyme target sequence Seq ID No 1872.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US015866.
XX
PR   16-MAY-2000; 2000US-00572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related gene,
PT   useful for treating cancer, diabetic retinopathy, macular degeneration,
PT   arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS   Claim 4; Page 123; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
```

```
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention
XX
SQ   Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 4.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         56 AGAGGAGTCTCT 67
               ||||||||||||
Db         17 AGAGGAGTCTCT 6


RESULT 929
ABV91040/c
ID   ABV91040 standard; DNA; 17 BP.
XX
AC   ABV91040;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1753.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-00001165.
XX
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   23-MAY-2001; 2001US-00864761.
PR   10-OCT-2001; 2001US-0328205P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT   -1, useful for treating disorders associated with decreased expression or
PT   activity of human POSHL1.
XX
PS   Example 2; SEQ ID NO 1753; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention. Note: The present sequence did not form part of the
CC   printed specification, but is based on sequence information supplied to
CC   Derwent by the European Patent Office
XX
SQ   Sequence 17 BP; 2 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 4.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        338 CCAGGGCCGGCT 349
              ||||||||||||
Db         12 CCAGGGCCGGCT 1


RESULT 930
ACF63330
ID   ACF63330 standard; DNA; 17 BP.
XX
AC   ACF63330;
XX
DT   09-OCT-2003  (first entry)
XX
DE   Human acetyl-CoA carboxylase antisense oligonucleotide SEQ ID NO:52.
XX
KW   Human; pharmacological; hypotensive; antilipaemic; vasotropic; laxative;
KW   dermatological; antidepressant; tranquilliser; antiinflammatory; eczema;
KW   antiulcer; antimigraine; neuroprotective; antiparkinsonian; analgesic;
KW   gynaecological; virucide; vulnerary; antiarthritic; antipsoriatic; cold;
KW   antimicrobial; cytostatic; litholytic; pathological disorder; depression;
KW   abnormal appetite; hypertension; hypercholesterolaemia; hyperlipidaemia;
KW   erectile dysfunction; anxiety; stress; inflammatory bowel syndrome;
KW   ulcerative colitis; Crohn's disease; renal stone; gall stone; migraine;
KW   constipation; headache; seizure; multiple sclerosis; polymyositis;
KW   fibromyalgia; Parkinson's disease; amyotrophic lateral sclerosis; trauma;
KW   chronic pain; pre-menstrual syndrome; sinusitis; carpal tunnel syndrome;
KW   chronic fatigue syndrome; rosacea; arthritis; psoriasis; prostatis;
KW   inflammation; heart burn; infection; colon cancer; malignant melanoma;
KW   skin disorder; antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO2003006478-A1.
XX
PD   23-JAN-2003.
XX
PF   10-JUL-2002; 2002WO-US021664.
XX
PR   10-JUL-2001; 2001US-0303820P.
XX
PA   (OLIG-) OLIGOS ETC INC.
XX
PI   Dale RMK,  Arrow A,  Thompson T;
XX
DR   WPI; 2003-221709/21.
XX
PT   Composition with a modified oligonucleotide useful for treating a patient
PT   with a pathological disorder such as abnormal appetite, hypertension,
PT   eczema, anxiety, stress, and cancer.
```

XX
PS Claim 17; Page 9; 173pp; English.
XX
CC The present invention describes a composition (I) suitable for
CC administration in a mammal, which comprises a modified oligonucleotide
CC (II) of 7-75 nucleotides containing 7 or more contiguous ribose groups
CC linked by achiral 5'-3' internucleoside phosphate linkages, where the
CC modified oligonucleotide is complementary to a region of a gene
CC associated with a pathological disorder. Also described: (1) a
CC nutritional supplement comprising (II); and (2) a cosmetic composition
CC comprising (II), where the modified oligonucleotide is complementary to a
CC region of a gene associated with a skin disorder. (I) and (II) can have
CC hypotensive, antilipaemic, vasotropic, dermatological, antidepressant,
CC tranquilliser, antiinflammatory, antiulcer, laxative, antimigraine,
CC neuroprotective, antiparkinsonian, analgesic, gynaecological, virucide,
CC vulnerary, antiarthritic, antipsoriatic, antimicrobial, cytostatic and
CC litholytic activities. (I) can be used for treating a patient with a
CC pathological disorder selected from abnormal appetite, hypertension,
CC hypercholesterolaemia, hyperlipidaemia, erectile dysfunction, eczema,
CC depression, anxiety, stress, inflammatory bowel syndrome, ulcerative
CC colitis, Crohn's disease, renal stones, gall stones, constipation, colds,
CC migraine headache, seizure, multiple sclerosis, polymyositis, sinusitis,
CC fibromyalgia, Parkinson's disease, amyotrophic lateral sclerosis (ALS),
CC chronic pain, pre-menstrual syndrome, trauma, carpal tunnel syndrome,
CC chronic fatigue syndrome, rosacea, arthritis, psoriasis, prostatis,
CC inflammation, heart burn, infection, poison ivy, colon cancer, malignant
CC melanoma, and malignant nasal polyps. The nutritional supplement is
CC useful for supplementing the diet of an individual, and the cosmetic
CC composition is useful for improving the appearance of the skin in an
CC individual with a skin disorder. ACF63279 to ACF63410 represent
CC nucleotide sequence given in the exemplification of the present invention
XX
SQ Sequence 17 BP; 2 A; 4 C; 9 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 146 GGTGGAGGCCGG 157
||||||||||||
Db 4 GGTGGAGGCCGG 15

RESULT 931
ABT39673
ID ABT39673 standard; DNA; 17 BP.
XX
AC ABT39673;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 5310.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 654; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 6 A; 7 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 47 CCACCACTCAGA 58
||||||||||||
Db 5 CCACCACTCAGA 16

RESULT 932
ACA07722/c
ID ACA07722 standard; RNA; 17 BP.
XX
AC ACA07722;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating zinzyme substrate #121.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX

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PR   07-DEC-1992;   92US-00987132.
PR   18-MAY-1994;   94US-00245466.
PR   15-AUG-1994;   94US-00291932.
PR   23-DEC-1996;   96US-00777916.
XX
PA   (STIN/) STINCHCOMB D T.
PA   (MCSW/) MCSWIGGEN J.
PA   (DRAP/) DRAPER K G.
XX
PI   Stinchcomb DT,  Mcswiggen J,  Draper KG;
XX
DR   WPI; 2003-340953/32.
XX
PT   Novel enzymatic nucleic acid molecules which down regulates expression of
PT   a sequence encoding a subunit of nuclear factor kappa B useful for
PT   treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS   Claim 3; Page 39; 72pp; English.
XX
CC   The invention describes an enzymatic nucleic acid molecule (I) which down
CC   regulates expression of a sequence encoding a subunit of nuclear factor
CC   kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC   configuration. The enzymatic nucleic acid molecule is adapted to treat
CC   cancer and is useful for down-regulating REL-A activity in a cell, for
CC   treating a patient having a condition associated with the level of REL-A.
CC   (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC   the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC   antisense nucleic acid molecules are useful for treating breast, lung,
CC   prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC   cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents the substrate of a novel enzymatic
CC   nucleic acid molecule
XX
SQ   Sequence 17 BP; 2 A; 11 C; 3 G; 0 T; 1 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 4.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        146 GGTGGAGGCCGG 157
              ||||||||||||
Db         17 GGTGGAGGCCGG 6


RESULT 933
ACA07649
ID   ACA07649 standard; RNA; 17 BP.
XX
AC   ACA07649;
XX
DT   03-JUN-2003  (first entry)
XX
DE   NFKB sub-unit modulating zinzyme substrate #48.
XX
KW   Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW   G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW   lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW   oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW   cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW   lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW   chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW   cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW   gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW   rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW   gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW   transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW   allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS   Homo sapiens.
XX
PN   US2002177568-A1.
XX
PD   28-NOV-2002.
XX
PF   23-MAY-2001; 2001US-00864785.
XX
PR   07-DEC-1992;   92US-00987132.
PR   18-MAY-1994;   94US-00245466.
PR   15-AUG-1994;   94US-00291932.
PR   23-DEC-1996;   96US-00777916.
XX
PA   (STIN/) STINCHCOMB D T.
PA   (MCSW/) MCSWIGGEN J.
PA   (DRAP/) DRAPER K G.
XX
PI   Stinchcomb DT,  Mcswiggen J,  Draper KG;
XX
DR   WPI; 2003-340953/32.
XX
PT   Novel enzymatic nucleic acid molecules which down regulates expression of
PT   a sequence encoding a subunit of nuclear factor kappa B useful for
PT   treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS   Claim 3; Page 38; 72pp; English.
XX
CC   The invention describes an enzymatic nucleic acid molecule (I) which down
CC   regulates expression of a sequence encoding a subunit of nuclear factor
CC   kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC   configuration. The enzymatic nucleic acid molecule is adapted to treat
CC   cancer and is useful for down-regulating REL-A activity in a cell, for
CC   treating a patient having a condition associated with the level of REL-A.
CC   (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC   the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC   antisense nucleic acid molecules are useful for treating breast, lung,
CC   prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC   cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents the substrate of a novel enzymatic
CC   nucleic acid molecule
XX
SQ   Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   91.7%;  Pred. No. 4.6e+02;
  Matches   11;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        268 ACCTGGAGCAGG 279
              |||:||||||||
Db          2 ACCUGGAGCAGG 13


RESULT 934
ACC64123/c
ID   ACC64123 standard; DNA; 17 BP.
XX
```

```
AC   ACC64123;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Murine oligonucleotide associated with tumour supression, SEQ ID 1370.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; ss.
XX
OS   Mus musculus.
XX
PN   WO2003025176-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004210.
XX
PR   17-SEP-2001; 2001FR-00011979.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-333167/31.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 191; 738pp; French.
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ   Sequence 17 BP; 6 A; 1 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 4.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        366 CTCACTTTCCTG 377
              ||||||||||||
Db         15 CTCACTTTCCTG 4


RESULT 935
AAQ34452
ID   AAQ34452 standard; DNA; 18 BP.
XX
AC   AAQ34452;
XX
DT   17-DEC-2001  (revised)
DT   12-MAY-1993  (first entry)
XX
DE   DQA1 probe AG1, for alleles 0101, 0102 and 0103.
XX
KW   Amplification; conformation polymorphism; SSCP; DQ-alpha; DQ-beta;
KW   cystic fibrosis; neurofibromatosis; ss.
XX
OS   Synthetic.
XX
PN   USN7751892-N.
XX
PD   01-DEC-1992.
XX
PF   29-AUG-1991;   91US-00751892.
XX
PR   29-AUG-1991;   91US-00751892.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICE.
XX
PI   Mann D,  Dean M,  Carrington M,  White MB;
XX
DR   WPI; 1993-017809/02.
XX
PT   Distinguishing multiple alleles and identifying new alleles - by single-
PT   strand conformation polymorphism technique using specific gel
PT   electrophoresis conditions.
XX
PS   Disclosure; Page 19; 36pp; English.
XX
CC   The oligomer AG1 represents a probe for DQA1 alleles 0101, 0102 and 0103
CC   and is used to distinguish multiple alleles of a gene of the immunoglobin
CC   supergene family. The DNA encoding the gene of interest in a sample is
CC   amplified and then denatured. The amplified DNA is then separated on a
CC   non-denaturing polyarylamide gel consisting of 5 percent bis-acrylamide
CC   with 0-10 percent glycerol, and the presence or absence of DNA bands
CC   showing hybridisation is detected. Before amplification of the gene, the
CC   alleles may be divided into subsets by oligonucleotide hybridisation.
CC   Using single stranded conformation polymorphism (SSCP) multiple alleles
CC   in complex genetic systems can be distinguished e.g. DQ-alpha and DQ-beta
CC   and new alleles identified. The method may be used in studying genetic
CC   associations with disease, in forensic analyses and typing tissues for
CC   transplantation. The SSCP method has been used for detection of mutant
CC   alleles which correlate with the presence of disorders such as cystic
CC   fibrosis and neurofibromatosis. See also AAQ34443-73. (Note: Revised
CC   entry submitted to correct the patent number format of US Government-
CC   owned NTIS applications to prevent clashes with ongoing US granted patent
CC   numbers. For further information please visit the Derwent web site at
CC   www.derwent.com/dwpi/updates/ntis_us.html.)
XX
SQ   Sequence 18 BP; 1 A; 5 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 5.1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        139 GCCTGGCGGTGG 150
              ||||||||||||
Db          1 GCCTGGCGGTGG 12


RESULT 936
AAX36716
ID   AAX36716 standard; DNA; 18 BP.
XX
AC   AAX36716;
XX
DT   14-JUL-1999  (first entry)
XX
DE   PCR primer for Human phosphodiesterase, PDE8, coding sequence.
XX
KW   Phosphodiesterase 8; PDE8; human; cyclic nucleotide pathway; therapy;
KW   intracellular cyclic nucleotide level modulation; cAMP; cGMP; PCR primer;
KW   ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9919495-A1.
XX
PD   22-APR-1999.
XX
PF   16-OCT-1998;   98WO-US021956.
XX
PR   16-OCT-1997;   97US-00951648.
```

```
XX
PA   (ICOS-) ICOS CORP.
XX
PI   Loughney K;
XX
DR   WPI; 1999-277645/23.
XX
PT   New isolated phosphodiesterase genes and polypeptides for identifying
PT   specific binding partners.
XX
PS   Example 3; Page 14; 80pp; English.
XX
CC   This sequence is a PCR primer for DNA encoding the human
CC   phosphodiesterase 8 (PDE8) of the invention. The phosphodiesterase genes
CC   and polypeptides are used to develop products for treating conditions in
CC   which cyclic nucleotide pathways are aberrant and for modulation of
CC   intracellular cyclic nucleotide levels. The PDE8 polypeptides exhibit
CC   high affinity for hydrolysis of both cAMP and cGMP but relatively low
CC   sensitivity to enzyme inhibitors specific for other PDE families. The
CC   PDE8A polypeptides and polynucleotides can be used for identifying their
CC   specific binding partners. The products can provide approaches for
CC   treating conditions in which cyclic nucleotide pathways are aberrant as
CC   well as conditions in which modulation of intracellular cAMP and/or cGMP
CC   levels in certain cell types is desirable
XX
SQ   Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 5.1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         62 GTCTCTGCACTA 73
              ||||||||||||
Db          3 GTCTCTGCACTA 14


RESULT 937
AAA58509/c
ID   AAA58509 standard; DNA; 18 BP.
XX
AC   AAA58509;
XX
DT   20-OCT-2000  (first entry)
XX
DE   PCR primer used to amplify bleomycin (BLM) gene cluster ORF25.
XX
KW   BLM gene cluster; bleomycin gene cluster; polyketide metabolite;
KW   bleomycin; bleomycin analogue; holo-carrier protein; thiazolidine;
KW   thiazoline; bithiazoline; microbial metabolite; sugar; PCR primer; ss.
XX
OS   Streptomyces verticillus.
XX
PN   WO200040704-A1.
XX
PD   13-JUL-2000.
XX
PF   06-JAN-2000; 2000WO-US000445.
XX
PR   06-JAN-1999;   99US-0115435P.
PR   05-FEB-1999;   99US-0118848P.
PR   05-JAN-2000; 2000US-00477962.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Shen B,  Du L,  Sanchez C,  Chen M,  Edwards DJ;
XX
DR   WPI; 2000-465974/40.
XX
PT   New bleomycin gene cluster components useful for peptide and/or
PT   polyketide metabolites, especially bleomycin, production and for
PT   chemically modifying biological molecules.
XX
PS   Disclosure; Page 22; 162pp; English.
XX
CC   PCR primers AAA58474-A58541 were used to amplify open reading frames
CC   (ORFs) 8 to 41 of the BLM (Bleomycin) gene cluster. The proteins encoded
CC   by the gene cluster are useful for producing peptides and/or polyketide
CC   metabolites, especially bleomycin or bleomycin analogues. They are also
CC   useful for chemically modifying biological molecules to produce branched
CC   methyl groups, and for coupling amino acids and fatty acids. They may be
CC   reacted with an apo-carrier protein and coenzyme A to produce a holo-
CC   carrier protein. The BLM gene cluster or catalytic domains can be used
CC   individually or collectively to produce thiazolidine, thiazoline,
CC   bithiazoline and bithiazoline-containing microbial metabolites. The BLM
CC   gene cluster may also be used to produce sugars
XX
SQ   Sequence 18 BP; 1 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 5.1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        326 GGCGGCGGACGA 337
              ||||||||||||
Db         15 GGCGGCGGACGA 4


RESULT 938
AAS03269
ID   AAS03269 standard; DNA; 18 BP.
XX
AC   AAS03269;
XX
DT   07-SEP-2001  (first entry)
XX
DE   Mouse mRPL19 Taqman probe.
XX
KW   Mouse; type-I cytokine receptor; TCCR; T-cell differentiation; Th1; Th2;
KW   agonist; antagonist; autoimmune inflammatory disease;
KW   allograft rejection; multiple sclerosis; inflammatory bowel disease;
KW   insulin-dependent diabetes mellitus; infectious disease;
KW   human immunodeficiency virus; allergic disorder; asthma;
KW   allergic rhinitis; HIV; probe; mRPL19; ss.
XX
OS   Mus musculus.
XX
PN   WO200129070-A2.
XX
PD   26-APR-2001.
XX
PF   18-OCT-2000; 2000WO-US028827.
XX
PR   20-OCT-1999;   99US-0160542P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   De Sauvage FJ,  Grewal I,  Gurney AL;
XX
DR   WPI; 2001-308474/32.
XX
PT   Modulating T-cell differentiation and cytokine release profiles into Th1
PT   and Th2 subtypes, for treating immune-related diseases in mammals, by
PT   administering modulator of type I cytokine receptor (TCCR).
XX
PS   Example 12; Fig 19; 126pp; English.
XX
CC   The sequence is a probe used in a Taqman real-time PCR experiment used to
CC   demonstrate that mice deficient of type I cytokine receptor, mTCCR, are
CC   impaired in their ability to mount a Th1 response. The invention relates
CC   to methods of modulating the differentiation of T-cells into the Th2
CC   subtype instead of the Th1 subtype, by administering a modulator of TCCR
CC   (e.g. an antagonist) to enhance, stimulate or potentiate T-cell
CC   differentiation, or using TCCR polypeptide or its agonists to prevent,
CC   inhibit or attenuate T-cell differentiation. Th1 mediated disease in
CC   mammal can be treated by administering a TCCR antagonist and Th2 diseases
CC   by administering a TCCR agonist. Th1-mediated diseases include allograft
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CC   rejection and autoimmune inflammatory diseases, such as allergic
CC   encephalomyelitis, multiple sclerosis, insulin-dependent diabetes
CC   mellitus, autoimmune uveoretinitis, inflammatory bowel disease or
CC   autoimmune thyroid disease. Th2-mediated diseases include infectious
CC   diseases, such as Leishmania major, Mycobacterium leprae, Candida
CC   albicans, Toxoplasma gondii, respiratory syncytial virus and human
CC   immunodeficiency virus (HIV) and allergic disorders, such as asthma,
CC   allergic rhinitis, dermatitis and vernal conjunctivitis
XX
SQ   Sequence 18 BP; 0 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 5.1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        246 TTCCCGGGCTCG 257
              ||||||||||||
Db          1 TTCCCGGGCTCG 12


RESULT 939
AAC66689
ID   AAC66689 standard; DNA; 18 BP.
XX
AC   AAC66689;
XX
DT   13-FEB-2001  (first entry)
XX
DE   Human PDE8 PCR primer W48A9.
XX
KW   Human; PDE8; phosphodiesterase 8; chromosome 6p26-27; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   US6133007-A.
XX
PD   17-OCT-2000.
XX
PF   16-OCT-1998;   98US-00174437.
XX
PR   16-OCT-1997;   97US-00951648.
XX
PA   (ICOS-) ICOS CORP.
XX
PI   Loughney K;
XX
DR   WPI; 2001-006138/01.
XX
PT   New phosphodiesterase 8A (PDE8A) polypeptides useful used in the
PT   systematic analysis of the structure and function of PDE8, and for
PT   identifying molecules with which PDE8A will interact.
XX
PS   Example 3; Col 10; 37pp; English.
XX
CC   The present invention relates to human phosphodiesterase 8 (PDE8)
CC   (AAC63695 and AAB28256). Phosphodiesterases hydrolyse 3', 5' cyclic
CC   nucleotides to their respective nucleoside 5' monophosphates. PDE8 may be
CC   used in the systematic analysis of the structure and function of PDE8,
CC   and for the identification of molecules with which PDE8 will interact.
CC   PDE8 coding sequence may be used in hybridisation assays to detect the
CC   capacity of cells to express PDE8, and as a basis for diagnostic methods
CC   useful for identifying a genetic alteration in a PDE8 locus that
CC   underlies a disease state or states. The human PDE8 gene has been
CC   localised to chromosome 6p26-27. The present sequence is a PCR primer
CC   used to isolate the coding sequence of human PDE8
XX
SQ   Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 5.1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         62 GTCTCTGCACTA 73
              ||||||||||||
Db          3 GTCTCTGCACTA 14


RESULT 940
AAS07305
ID   AAS07305 standard; DNA; 18 BP.
XX
AC   AAS07305;
XX
DT   12-SEP-2001  (first entry)
XX
DE   CPS1/TES1 genomic DNA sequencing primer FP8.
XX
KW   CPS1; peptide synthetase; peptide toxin; fungal pathogen;
KW   corn crop infection; ss; sequencing primer; FP8.
XX
OS   Cochliobolus heterostrophus.
XX
PN   WO200138489-A2.
XX
PD   31-MAY-2001.
XX
PF   22-NOV-2000; 2000WO-US032227.
XX
PR   23-NOV-1999;   99US-00448215.
XX
PA   (CORR ) CORNELL RES FOUND INC.
XX
PI   Yoder OC,  Turgeon BC,  Lu S;
XX
DR   WPI; 2001-367672/38.
XX
PT   New isolated nucleic acid molecule from a plant pathogen useful in
PT   preventing plant pathogenic infections.
XX
PS   Example 1; Page 54; 132pp; English.
XX
CC   The sequence represents a sequencing primer used to sequence a genomic
CC   clone from Cochliobolus heterostrophus which contains the CPS1 and TES1
CC   peptide synthetase genes. CPS1 is an enzyme thought to be involved in the
CC   production of peptide toxins, which are involved in the pathogenic
CC   infection of corn crops. The nucleic acids and proteins can be used as
CC   targets for anti-fungal compounds to prevent fungal corn infection and
CC   the nucleic acids can be used in gene therapy to alter the biosynthetic
CC   pathway for the peptide toxins to lower the pathogenicity of the fungi
XX
SQ   Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 5.1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        261 ACGGTGCACCTG 272
              ||||||||||||
Db          1 ACGGTGCACCTG 12


RESULT 941
ABL44735/c
ID   ABL44735 standard; DNA; 18 BP.
XX
AC   ABL44735;
XX
DT   11-APR-2002  (first entry)
XX
DE   Human chromosome 1p36-35 PCR primer SEQ ID NO:1779.
XX
KW   Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
```

PN JP2001321190-A.
XX
PD 20-NOV-2001.
XX
PF 12-MAR-2001; 2001JP-00068285.
XX
PR 10-MAR-2000; 2000JP-00066716.
XX
PA (RIKA) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX
DR WPI; 2002-144136/19.
XX
PT Arraying genome clones.
XX
PS Claim 4; Page 39; 528pp; Japanese.
XX
CC The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination are mixed in each of the
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
SQ Sequence 18 BP; 1 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 41 AGATGGCCACCA 52
||||||||||||
Db 17 AGATGGCCACCA 6

RESULT 942
ABS68429
ID ABS68429 standard; DNA; 18 BP.
XX
AC ABS68429;
XX
DT 19-NOV-2002 (first entry)
XX
DE Sequencing primer #20 for fungal DNA flanking REMI insertion site.
XX
KW Fungal pathogen; peptide synthetase gene cluster; iron reductase;
KW permease; major facilitator superfamily transporter; MFS transporter;
KW anti-fungal agent; fungicide; pathogenic fungi; plant pathogen; CPS1;
KW animal pathogen; fungal infection; wild grass; cereal; corn; mycocide;
KW leaf spot maize; immunocompromised vertebrate; pneumonia; arthritis;
KW miliary disease; bone infection; joint infection; skin disease;
KW aesophagitis; vaginitis; onychomycosis; inflammation; urinary tract;
KW kidney; liver; brain; gastrointestinal tract; lung; fungicidal;
KW mycocidal; antiarthritic; antiinflammatory; dermatological; CoA ligase;
KW sequencing; primer; ss.
XX
OS Cochliobolus heterostrophus.
OS Synthetic.

XX
PN WO200242444-A2.
XX
PD 30-MAY-2002.
XX
PF 21-NOV-2001; 2001WO-US043381.
XX
PR 22-NOV-2000; 2000US-0252649P.
PR 22-NOV-2000; 2000US-0252732P.
XX
PA (SYGN) SYNGENTA PARTICIPATIONS AG.
PA (CORR) CORNELL RES FOUND INC.
PA (YODE/) YODER O.
PA (TURG/) TURGEON B G.
PA (LUSS/) LU S.
XX
PI Yoder O, Turgeon BG, Lu S;
XX
DR WPI; 2002-666824/71.
XX
PT Nucleic acid molecules comprising fungal, e.g. Cochliobolus
PT heterostrophus, genes from a peptide synthetase gene cluster, useful for
PT identifying anti-fungal agents for treating fungal infections such as
PT pneumonia and arthritis.
XX
PS Example 1; Page 188; 315pp; English.
XX
CC The present invention relates to nucleic acid molecules comprising
CC fungal, e.g. Cochliobolus heterostrophus, genes from a peptide synthetase
CC gene cluster, encoding e.g. an iron reductase and/or a permease, or a
CC major facilitator superfamily (MFS) transporter protein. The
CC polynucleotides and polypeptides are useful for identifying a novel
CC fungicidal or mycocidal mode of action which permits rapid discovery of
CC novel inhibitors of gene products that are useful as fungicides or
CC mycocides. Anti-fungal agents identified using the polynucleotide and
CC polypeptide sequences of the invention, and antisense DNA are useful as
CC fungicides to suppress the growth of pathogenic fungi. The fungal
CC pathogens include plant pathogens such as Septoria trici, or Cochliobolus
CC heterostrophus, or animal pathogens such as Candida albicans. The anti-
CC fungal agents are useful for treating fungal infections in plants such as
CC wild grasses or cereals (e.g. corn). For example they can be used to
CC treat a disease called leaf spot maize caused by the pathogen C.
CC heterostrophus. The anti-fungal agents are particularly useful for
CC treating fungal infections of vertebrates, including immunocompromised
CC vertebrates, for e.g. pneumonia, arthritis, miliary disease, bone and
CC joint infection, skin disease, aesophagitis, vaginitis, onychomycosis,
CC and inflammation of the urinary tract, kidney, liver, brain,
CC gastrointestinal tract and lung. ABS68410-ABS68443 represent sequencing
CC primers used to sequence C. heterostrophus DNA flanking the REMI vector
CC insertion site in the examples of the present invention
XX
SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 261 ACGGTGCACCTG 272
||||||||||||
Db 1 ACGGTGCACCTG 12

RESULT 943
ABA03691
ID ABA03691 standard; DNA; 18 BP.
XX
AC ABA03691;
XX
DT 18-FEB-2002 (first entry)
XX
DE HSV-tk gene-del PCR primer TrTk1.
XX
KW Cytostatic; antitumour; gene therapy; thymidine kinase; tk;

KW splice acceptor site; splice donor site; cell destruction; cytostatic;
KW cancer; herpes simplex virus; HSV; PCR primer; ss.
XX
OS Herpes simplex virus.
OS Synthetic.
XX
PN WO200179502-A2.
XX
PD 25-OCT-2001.
XX
PF 13-APR-2001; 2001WO-GB001640.
XX
PR 13-APR-2000; 2000GB-00008966.
XX
PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
PI Apperley JF, Garin MI;
XX
DR WPI; 2002-026030/03.
XX
PT Novel polynucleotide comprising a thymidine kinase coding region encoding
PT thymidine kinase, which does not contain a functional acceptor and/or
PT splice donor site, useful for gene therapy techniques.
XX
PS Example 3; Page 59; 103pp; English.
XX
CC The invention relates to a polynucleotide encoding a thymidine kinase
CC (tk), where the tk coding region does not contain a functional splice
CC acceptor and/or splice donor site. The polynucleotide and the protein
CC that it encodes are useful for destroying cells. The polynucleotide is
CC introducing into the cells, allowing the cells to express tk. The cells
CC are then contacted with a substantially non-toxic agent which is
CC converted by tk into a toxic agent. The non-toxic agent is ganciclovir,
CC acyclovir, trifluorothymidine, 1-(2-deoxy,2-fluoro,beta-D-arabino
CC furanosyl)-5-iodouracil, ara-A, ara 1, 1-beta-D arabino furanosyl
CC thymine, 5-ethyl-2'-deoxyuridine, 5-iodo-5'-amino-2-5'-dideoxyuridine,
CC idoxuridine, AZT, AIV, dideoxycytidine, Ara C or bromovinyl deoxyuridine
CC (BVDV). The polynucleotide is also useful for in vivo or ex vivo gene
CC therapy, and for manufacturing a medicament for destroying cells in a
CC patient. The polynucleotide is used to destroy cells that are, or have
CC the potential to become, cancer cells. The polynucleotide does not
CC contain a splice donor and/or splice acceptor site, and so there is no
CC undesirable splicing, which would lead to the production of an aberrant
CC form of the thymidine kinase gene. Thus a greater proportion of
CC transduced target cells correctly express tk. The present sequence is a
CC primer used to selectively amplify the deleted form of the herpes simplex
CC virus (HSV)-tk gene using a 5' primer, which spans the truncation point
XX
SQ Sequence 18 BP; 2 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 335 CGACCAGGGCCG 346
||||||||||||
Db 3 CGACCAGGGCCG 14

RESULT 944
ABZ24285/c
ID ABZ24285 standard; DNA; 18 BP.
XX
AC ABZ24285;
XX
DT 14-APR-2003 (first entry)
XX
DE Wheat TAA1 cDNA RACE antisense primer OL2883.
XX
KW TAA1; wheat; anther; fatty acyl Co-A reductase; FAR; plant; dwarfism;
KW transgenic; lipid metabolism; plant growth; dermatological; octacosanol;
KW fatty alcohol; pharmaceutical; nutritional; dietary; PCR; primer; ss.
XX
OS Triticum aestivum.
XX
PN WO200299111-A2.
XX
PD 12-DEC-2002.
XX
PF 07-JUN-2002; 2002WO-CA000834.
XX
PR 07-JUN-2001; 2001US-0296159P.
XX
PA (CANA) NAT RES COUNCIL CANADA.
XX
PI Selvaraj G, Wang A, Xia Q, Xie W;
XX
DR WPI; 2003-167346/16.
XX
PT New isolated and purified anther-specific TAA1 nucleotide sequence,
PT useful for the production of transgenic plants with increased or altered
PT levels of fatty alcohols used as nutritional or pharmaceutical
PT compositions.
XX
PS Example; Page 46; 124pp; English.
XX
CC The invention relates to novel isolated and purified polynucleotides,
CC designated TAA1 genes, endogenously expressed in wheat anthers and encode
CC polypeptides having fatty acyl Co-A reductase (FAR) activity. The TAA1
CC genes are used to produce transgenic plants where the sequence expressed
CC alters lipid metabolism of the transgenic plant. The octacosanol derived
CC from the transgenic plant is useful as a nutritional supplement. The
CC fatty alcohol derived from the transgenic plant is useful as a wax,
CC cleaning agent, cosmetic agent, dermatological agent, pharmaceutical
CC agent, nutritional agent or as a coating agent. A composition comprising
CC a fatty alcohol derived from the transgenic plant is useful in a method
CC of treating or preventing a medical condition. The methods are useful for
CC providing a dietary supplement, the production and isolation of fatty
CC alcohols, and for inducing dwarfism in plants. The methods and other
CC compositions of the present invention are useful for the production of
CC transgenic plants and other organisms that comprise increased or altered
CC levels of fatty alcohols used as nutritional or pharmaceutical
CC compositions. Sequences ABZ24280-86 represent primers used for isolating
CC the wheat TAA1 genes
XX
SQ Sequence 18 BP; 4 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 12; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 5.1e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 337 ACCAGGGCCGGC 348
||||||||||||
Db 15 ACCAGGGCCGGC 4

RESULT 945
ADC26391
ID ADC26391 standard; DNA; 18 BP.
XX
AC ADC26391;
XX
DT 18-DEC-2003 (first entry)
XX
DE NOV protein-related reverse PCR primer SEQ ID 216.
XX
KW NOV; cytostatic; metabolic disorder; immune; neurodegenerative;
KW circulatory; haemopoietic; wasting; cancer; gene therapy; vaccine;
KW transgenic; human; ss; PCR; primer.
XX
OS Homo sapiens.
XX
PN WO2003004687-A2.
XX
PD 16-JAN-2003.
XX

```
PF   03-JUL-2002; 2002WO-US021361.
XX
PR   05-JUL-2001; 2001US-0303046P.
PR   09-JUL-2001; 2001US-0303828P.
PR   09-JUL-2001; 2001US-0304016P.
PR   11-JUL-2001; 2001US-0304502P.
PR   13-JUL-2001; 2001US-0305262P.
PR   16-JUL-2001; 2001US-0305673P.
PR   17-JUL-2001; 2001US-0306085P.
PR   24-JUL-2001; 2001US-0307536P.
PR   27-JUL-2001; 2001US-0308228P.
PR   30-JUL-2001; 2001US-0308877P.
PR   01-AUG-2001; 2001US-0309255P.
PR   17-AUG-2001; 2001US-0313328P.
PR   12-SEP-2001; 2001US-0318711P.
PR   19-SEP-2001; 2001US-0323380P.
PR   21-SEP-2001; 2001US-0323969P.
PR   04-JAN-2002; 2002US-0345022P.
PR   04-JAN-2002; 2002US-0345038P.
PR   28-FEB-2002; 2002US-0361172P.
PR   01-MAR-2002; 2002US-0360814P.
PR   01-MAR-2002; 2002US-0360830P.
PR   01-MAR-2002; 2002US-0361133P.
PR   01-MAR-2002; 2002US-0361147P.
PR   05-MAR-2002; 2002US-0361677P.
PR   02-APR-2002; 2002US-0363637P.
PR   12-APR-2002; 2002US-0372326P.
PR   16-APR-2002; 2002US-0372990P.
PR   19-APR-2002; 2002US-0373881P.
PR   19-APR-2002; 2002US-0373921P.
PR   02-JUL-2002; 2002US-00188186.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Anderson DW,  Berghs C,  Boldog FL,  Burgess CE,  Casman SJ;
PI   Catterton E,  Edinger S,  Eisen AJ,  Ellerman K,  Gerlach V,  Gorman L;
PI   Guo X,  Jeffers M,  Kekuda R,  Li L,  Malyankar UM,  Miller CE;
PI   Padigaru M,  Patturajan M,  Pena CEA,  Rastelli L,  Shenoy S;
PI   Shimkets RA,  Spaderna SK,  Spytek KA,  Stone DJ,  Taupier RJ;
PI   Vernet CAM,  Voss EZ,  Zhong M;
XX
DR   WPI; 2003-221607/21.
XX
PT   New isolated NOVX polypeptide, useful for determining the presence of, or
PT   predisposition to a disease associated with altered levels of expression
PT   of the polypeptide, and for treating or preventing cancer.
XX
PS   Example C; SEQ ID NO 216; 478pp; English.
XX
CC   The invention relates to a novel isolated NOV polypeptide. The
CC   polypeptide of the invention demonstrates cytostatic activity and may be
CC   used for determining the presence of, or predisposition to a disease
CC   associated with altered levels of expression of the polypeptide,
CC   including metabolic disorders, immune disorders, neurodegenerative
CC   disorders, circulatory diseases, haemopoietic disorders, wasting diseases
CC   and cancer. The polypeptide may also be utilised during gene therapy
CC   procedures, vaccine development and transgenic animal production. The
CC   current sequence is that of the PCR primer of the invention which was
CC   used to analyse human NOV DNA.
XX
SQ   Sequence 18 BP; 4 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 5.1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        344 CCGGCTGCTCTA 355
              ||||||||||||
Db          2 CCGGCTGCTCTA 13


RESULT 946
AAD59994
ID   AAD59994 standard; DNA; 18 BP.
XX
AC   AAD59994;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human FB66a DNA sequencing primer, W48A9.
XX
KW   Phosphodiesterase 8; PDE8; human; FB66a; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US6566087-B1.
XX
PD   20-MAY-2003.
XX
PF   11-OCT-2000; 2000US-00686055.
XX
PR   16-OCT-1997;   97US-00951648.
PR   16-OCT-1998;   98US-00174437.
XX
PA   (ICOS-) ICOS CORP.
XX
PI   Loughney K;
XX
DR   WPI; 2003-719642/68.
XX
PT   Identifying a specific binding partner of phosphodiesterase 8 (PDE8)
PT   useful for purifying PDE8 products in fluid samples comprises contacting
PT   PDE8 with a compound and detecting binding.
XX
PS   Example 3; Col 10; 37pp; English.
XX
CC   The invention relates to a method for identifying a specific binding
CC   partner of phosphodiesterase 8 (PDE8). The method is useful for
CC   identifying a specific binding partner of PDE8, which inhibits or
CC   enhances activity of PDE8. The binding partners of PDE8 are useful for
CC   purification, detection or quantification of PDE8 products in fluid and
CC   tissue samples using immunological procedures. Modulators of PDE8
CC   activity are useful in treating a wide range of diseases and
CC   physiological conditions in which PDE8 activity is known to be involved.
CC   The present sequence is a primer used for sequencing human PDE8 A2 splice
CC   variant DNA (FB66a)
XX
SQ   Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 12;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 5.1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         62 GTCTCTGCACTA 73
              ||||||||||||
Db          3 GTCTCTGCACTA 14


RESULT 947
AAQ43232/c
ID   AAQ43232 standard; DNA; 15 BP.
XX
AC   AAQ43232;
XX
DT   25-MAR-2003  (revised)
DT   13-OCT-1993  (first entry)
XX
DE   B-B10 V region primer Vkfor.
XX
KW   Complementarity-determining region; CDR; humanised; antibody; hIL2R;
KW   human; interleukin; IL-2; receptor; murine; anti-human; Ab; T-cell;
KW   monoclonal antibody; B-B10; mixed lymphocyte reaction; variable; V;
KW   region; PCR; framework; plasmid; heavy; H; light; L; amplify; primer;
KW   polymerase chain reaction; ss.
XX
OS   Synthetic.
```

XX
PN WO9311238-A1.
XX
PD 10-JUN-1993.
XX
PF 03-DEC-1992; 92WO-JP001583.
XX
PR 06-DEC-1991; 91JP-00323319.
XX
PA (SUMU) SUMITOMO PHARM CO LTD.
PA (BIOT) BIOTEST PHARMA GMBH.
PA (INNO-) INNOTHERAPIE LAB.
XX
PI Nakatani T, Gomi H, Wijdenes J, Noguchi H;
XX
DR WPI; 1993-197057/24.
XX
PT Humanised antibody comprising - CDR region of mouse MAB B-B10 specific
PT for IL-2 receptor useful for treating carcinoma expressing IL-2 receptor.
XX
PS Disclosure; Page 45; 62pp; English.
XX
CC The sequences given in AAQ43226-32 are primers which were used in the
CC cloning of DNA encoding the variable (V) regions of the murine anti-
CC human IL-2 receptor monoclonal Ab (MAb) B-B10. This MAb was used in the
CC construction of a humanised antibody (Ab) which binds specifically to
CC human interleukin (IL)-2 receptor (hIL2R). The complementarity-
CC determining regions (CDRs) for the hIL2R MAb were derived from B-B10 (see
CC also AAR37599-04). The hIL2R MAb is antagonistic to the binding of IL-2
CC to the IL-2 receptor on human T-cells. It also inhibits the human mixed
CC lymphocyte reaction. The cDNA encoding the variable (V) region of the B-
CC B10 Ab was cloned by PCR and sequenced (see also AAQ43233-36) A human Ab
CC with high levels of amino acid sequence homology to the murine sequence
CC was selected and the framework of this Ab was bound with the B-B10 V
CC region CDR and a part of the framework to design several kinds of the
CC humanised B-B10 V region. The DNA sequence coding this humanised B-B10
CC was synthesised and a plasmid expressing humanised B-B10 was constructed.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        282 GGCACCAAGCTGGTG 296
              || |||||||||| |
Db         15 GGGACCAAGCTGGAG 1
```

RESULT 948
AAV48908/c
ID AAV48908 standard; DNA; 15 BP.
XX
AC AAV48908;
XX
DT 15-OCT-1998 (first entry)
XX
DE c-fos gene antisense oligonucleotide c-fos-22.
XX
KW c-fos; antisense oligonucleotide; modulate; gene expression; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN EP856579-A1.
XX
PD 05-AUG-1998.
XX
PF 31-JAN-1997; 97EP-00101531.
XX
PR 31-JAN-1997; 97EP-00101531.
XX
PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI Schlingensiepen K, Brysch W;
XX
DR WPI; 1998-400910/35.
XX
PT Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT consecutive guanosine or inosine - and have specific ratio of residues
PT able to form two or three hydrogen bonds, have greater activity and
PT reduced toxicity, used therapeutically or to modulate growth of cells in
PT culture.
XX
PS Claim 10; Fig 7; 286pp; English.
XX
CC AAV48887-929 represent antisense oligonucleotides directed against the c-
CC fos gene. Of these, only oligonucleotides AAV48887-917 resulted in
CC significant redcution in c-fos protein expression, while oligonucleotides
CC AAV48918-29 had little effect. The oligonucleotides exemplify the
CC invention. The specification describes oligonucleotides that contain 8-30
CC nucleotides, which contain at most 8 nucleotides that can each form three
CC hydrogen bonds to cytosine; do not contain four consecutive nucleotides
CC able to form three H-bonds each to four consecutive cytosines; do not
CC contain two sequences of three consecutive nucleotides each able to form
CC three H-bonds to three consecutive cytosines, and the ratio between
CC residues able to form two H-bonds each (2R) or three such bonds (3R) is
CC given by 2R/3R = 0.33-0.72. The oligonucleotides are used to modulate
CC expression of genes, particularly the genes for p53, ErB-2, junB, junD,
CC TGF-beta 1 or beta 2 to control proliferation of primary cell cultures
CC (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts
CC and/or keratinocytes). The oligonucleotides can also be used to analyse
CC function of proteins (by altering their expression or activity) and
CC therapeutically, e.g. in cases of cancer or (targeting TGF) for
CC stimulating the immune system
XX
SQ Sequence 15 BP; 2 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        286 CCAAGCTGGTGAAGG 300
              |||| ||| ||||||
Db         15 CCAACCTGCTGAAGG 1
```

RESULT 949
AAV48892
ID AAV48892 standard; DNA; 15 BP.
XX
AC AAV48892;
XX
DT 15-OCT-1998 (first entry)
XX
DE c-fos gene antisense oligonucleotide c-fos-6.
XX
KW c-fos; antisense oligonucleotide; modulate; gene expression; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN EP856579-A1.
XX
PD 05-AUG-1998.
XX
PF 31-JAN-1997; 97EP-00101531.
XX
PR 31-JAN-1997; 97EP-00101531.
XX
PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI Schlingensiepen K, Brysch W;
XX
DR WPI; 1998-400910/35.

```
XX
PT   Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT   consecutive guanosine or inosine - and have specific ratio of residues
PT   able to form two or three hydrogen bonds, have greater activity and
PT   reduced toxicity, used therapeutically or to modulate growth of cells in
PT   culture.
XX
PS   Claim 10; Fig 7; 286pp; English.
XX
CC   AAV48887-929 represent antisense oligonucleotides directed against the c-
CC   fos gene. Of these, only oligonucleotides AAV48887-917 resulted in
CC   significant redcution in c-fos protein expression, while oligonucleotides
CC   AAV48918-29 had little effect. The oligonucleotides exemplify the
CC   invention. The specification describes oligonucleotides that contain 8-30
CC   nucleotides, which contain at most 8 nucleotides that can each form three
CC   hydrogen bonds to cytosine; do not contain four consecutive nucleotides
CC   able to form three H-bonds each to four consecutive cytosines; do not
CC   contain two sequences of three consecutive nucleotides each able to form
CC   three H-bonds to three consecutive cytosines, and the ratio between
CC   residues able to form two H-bonds each (2R) or three such bonds (3R) is
CC   given by 2R/3R = 0.33-0.72. The oligonucleotides are used to modulate
CC   expression of genes, particularly the genes for p53, ErB-2, junB, junD,
CC   TGF-beta 1 or beta 2 to control proliferation of primary cell cultures
CC   (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts
CC   and/or keratinocytes). The oligonucleotides can also be used to analyse
CC   function of proteins (by altering their expression or activity) and
CC   therapeutically, e.g. in cases of cancer or (targeting TGF) for
CC   stimulating the immune system
XX
SQ   Sequence 15 BP; 4 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        286 CCAAGCTGGTGAAGG 300
              ||| ||||| |||||
Db          1 CCATGCTGGAGAAGG 15


RESULT 950
AAV48699
ID   AAV48699 standard; DNA; 15 BP.
XX
AC   AAV48699;
XX
DT   15-OCT-1998  (first entry)
XX
DE   junB gene antisense oligonucleotide JunB-T-8.
XX
KW   junB; junD; antisense oligonucleotide; modulate; gene expression; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   EP856579-A1.
XX
PD   05-AUG-1998.
XX
PF   31-JAN-1997;   97EP-00101531.
XX
PR   31-JAN-1997;   97EP-00101531.
XX
PA   (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI   Schlingensiepen K,  Brysch W;
XX
DR   WPI; 1998-400910/35.
XX
PT   Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT   consecutive guanosine or inosine - and have specific ratio of residues
PT   able to form two or three hydrogen bonds, have greater activity and
PT   reduced toxicity, used therapeutically or to modulate growth of cells in
PT   culture.
XX
PS   Example 3; Fig 5c; 286pp; English.
XX
CC   AAV48564-708 represent antisense oligonucleotides directed against the
CC   junB and junD genes. Of these, only oligonucleotides AAV48565-614
CC   resulted in effective downregulation of negative growth control by JunB
CC   or JunD, while AAV48615-708 had little effect. The oligonucleotides
CC   exemplify the invention. The specification describes oligonucleotides
CC   that contain 8-30 nucleotides, which contain at most 8 nucleotides that
CC   can each form three hydrogen bonds to cytosine; do not contain four
CC   consecutive nucleotides able to form three H-bonds each to four
CC   consecutive cytosines; do not contain two sequences of three consecutive
CC   nucleotides each able to form three H-bonds to three consecutive
CC   cytosines, and the ratio between residues able to form two H-bonds each
CC   (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
CC   oligonucleotides are used to modulate expression of genes, particularly
CC   the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control
CC   proliferation of primary cell cultures (e.g. bone marrow stem, liver or
CC   kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC   oligonucleotides can also be used to analyse function of proteins (by
CC   altering their expression or activity) and therapeutically, e.g. in cases
CC   of cancer or (targeting TGF) for stimulating the immune system
XX
SQ   Sequence 15 BP; 2 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        147 GTGGAGGCCGGCTTC 161
              | ||||||| |||||
Db          1 GGGGAGGCCAGCTTC 15


RESULT 951
AAX31429
ID   AAX31429 standard; DNA; 15 BP.
XX
AC   AAX31429;
XX
DT   21-MAY-1999  (first entry)
XX
DE   Tag sequence of a transcript decreased in colorectal cancer.
XX
KW   Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
KW   diagnosis; prognosis; treatment; ss.
XX
OS   Homo sapiens.
XX
PN   WO9853319-A2.
XX
PD   26-NOV-1998.
XX
PF   20-MAY-1998;   98WO-US010277.
XX
PR   21-MAY-1997;   97US-0047352P.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Vogelstein B,  Kinzler KW;
XX
DR   WPI; 1999-070161/06.
XX
PT   Use of isolated gene transcripts - useful for developing products for the
PT   diagnosis, prognosis and treatment of cancers, particularly colon and
PT   pancreatic cancer.
XX
PS   Claim 1; Page 50; 120pp; English.
XX
CC   AAX30947-31815 represent tag sequences of transcripts that are
CC   differentially expressed in colorectal cancer, in pancreatic cancer, or
CC   in both. The tag sequences can be used to identify genes by matching the
```

CC tag to a gen data base member, or by using the tag sequences as probes to
CC isolate unidentified genes from cDNA libraries. The tag sequences can
CC also be used in a method for diagnosing colon or pancreatic cancer in a
CC sample suspected of being neoplastic. The method comprises comparing the
CC level of at least one transcript in a first sample of a tissue to a
CC second sample, where the first sample is a colonic tissue suspected of
CC being neoplastic and the second sample is a normal human colonic tissue.
CC The transcript is identified by a tag selected from AAX30947-31815. The
CC methods of the invention can be used in the diagnosis, prognosis and
CC treatment of cancer
XX
SQ Sequence 15 BP; 4 A; 1 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 287 CAAGCTGGTGAAGGA 301
|| | ||||||||||
Db 1 CATGTTGGTGAAGGA 15

RESULT 952
AAX31675
ID AAX31675 standard; DNA; 15 BP.
XX
AC AAX31675;
XX
DT 21-MAY-1999 (first entry)
XX
DE Tag sequence of a transcript increased in pancreatic cancer.
XX
KW Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
KW diagnosis; prognosis; treatment; ss.
XX
OS Homo sapiens.
XX
PN WO9853319-A2.
XX
PD 26-NOV-1998.
XX
PF 20-MAY-1998; 98WO-US010277.
XX
PR 21-MAY-1997; 97US-0047352P.
XX
PA (UYJO) UNIV JOHNS HOPKINS.
XX
PI Vogelstein B, Kinzler KW;
XX
DR WPI; 1999-070161/06.
XX
PT Use of isolated gene transcripts - useful for developing products for the
PT diagnosis, prognosis and treatment of cancers, particularly colon and
PT pancreatic cancer.
XX
PS Claim 13; Page 68; 120pp; English.
XX
CC AAX30947-31815 represent tag sequences of transcripts that are
CC differentially expressed in colorectal cancer, in pancreatic cancer, or
CC in both. The tag sequences can be used to identify genes by matching the
CC tag to a gen data base member, or by using the tag sequences as probes to
CC isolate unidentified genes from cDNA libraries. The tag sequences can
CC also be used in a method for diagnosing colon or pancreatic cancer in a
CC sample suspected of being neoplastic. The method comprises comparing the
CC level of at least one transcript in a first sample of a tissue to a
CC second sample, where the first sample is a colonic tissue suspected of
CC being neoplastic and the second sample is a normal human colonic tissue.
CC The transcript is identified by a tag selected from AAX30947-31815. The
CC methods of the invention can be used in the diagnosis, prognosis and
CC treatment of cancer
XX
SQ Sequence 15 BP; 4 A; 1 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 287 CAAGCTGGTGAAGGA 301
|| | ||||||||||
Db 1 CATGTTGGTGAAGGA 15

RESULT 953
AAX59553/c
ID AAX59553 standard; DNA; 15 BP.
XX
AC AAX59553;
XX
DT 21-JUL-1999 (first entry)
XX
DE Intron 2/exon 3 juntion of the mouse Pitx3 gene.
XX
KW Pitx3; homeobox domain protein; lens development; lens disorder;
KW cataract; detection; ocular disease; ASMD; Peter's anomaly;
KW anterior segment mesenchymal dysgenesis; ss.
XX
OS Mus sp.
XX
PN WO9921996-A1.
XX
PD 06-MAY-1999.
XX
PF 26-OCT-1998; 98WO-US022689.
XX
PR 24-OCT-1997; 97US-00957351.
XX
PA (IOWA) UNIV IOWA RES FOUND.
XX
PI Semina EV, Murray JC;
XX
DR WPI; 1999-312965/26.
XX
PT Pitx3, homeobox protein, and related nucleic acid sequences.
XX
PS Example 6; Page 103; 128pp; English.
XX
CC AAX59550-53 represent intron/exon and exon/intron junctions of the mouse
CC Pitx3 gene. Pitx3 proteins are homeobox domain proteins, which are
CC involved in the development of the lens and contribute to diseases and
CC disorders of the lens, such as cataracts. The Pitx3 nucleic acids (e.g.
CC antisense sequences, ribozymes and triplex nucleic acids), probes derived
CC from them and polypeptides, are useful in claimed methods to detect an
CC ocular disease, especially of the lens, e.g. cataract formation. Specific
CC conditions that can be detected and treated are Anterior Segment
CC Mesenchymal Dysgenesis (ASMD) and Peter's anomaly
XX
SQ Sequence 15 BP; 3 A; 6 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 15 CTGCGGGTGACCGAG 29
|||||||| |||||
Db 15 CTGCGGGTATCCGAG 1

RESULT 954
AAC73381/c
ID AAC73381 standard; DNA; 15 BP.
XX
AC AAC73381;
XX
DT 02-FEB-2001 (first entry)
XX
DE Forward primer #78 used in multiplexing PCR/SBE assay.

XX
KW Oligonucleotide array; genotyping; single base extension reaction; SBE;
KW PCR primer; polymorphic locus; single nucleotide polymorphism; ss.
XX
OS Unidentified.
XX
PN WO200058516-A2.
XX
PD 05-OCT-2000.
XX
PF 27-MAR-2000; 2000WO-US008069.
XX
PR 26-MAR-1999; 99US-0126473P.
PR 23-JUN-1999; 99US-0140359P.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
PI Fan J, Hirschhorn JN, Huang X, Kaplan P, Lander ES, Lockhart DJ;
PI Ryder T, Sklar P;
XX
DR WPI; 2000-656171/63.
XX
PT Universal array of oligonucleotides tags attached to a solid substrate
PT along with locus-specific tagged oligonucleotides useful in genotyping
PT using single base extension reactions.
XX
PS Example 7; Page 56; 70pp; English.
XX
CC The present invention relates to an oligonucleotide array comprising
CC oligonucleotide tags fixed to a solid substrate. The oligonucleotide
CC array is useful for genotyping a nucleic acid sample at one or more loci
CC via single base extension (SBE) reactions. A pair of primers is used to
CC amplify a polymorphic locus in a sample e.g. a single nucleotide
CC polymorphism (SNP). The present sequence is one of the primers used in
CC the method of the present invention to amplify a polymorphic sample. The
CC amplified nucleic acid product is then used as a template in a SBE
CC reaction with an extension primer. The SBE reaction products are used to
CC form the oligonucleotide array
XX
SQ Sequence 15 BP; 4 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 153 GCCGGCTTCGACTGG 167
||||||||| ||||
Db 15 GCCGGCTTCCTCTGG 1

RESULT 955
AAF47147/c
ID AAF47147 standard; DNA; 15 BP.
XX
AC AAF47147;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #567.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 7; Page 47; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 319 GCGTGCTGGCGGCGG 333
||||||||| | |||
Db 15 GCGTGCTGGAGACGG 1

RESULT 956
AAF50769
ID AAF50769 standard; DNA; 15 BP.
XX
AC AAF50769;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #1729.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.

```
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 72; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        147 GTGGAGGCCGGCTTC 161
              ||||||  |||||  ||
Db          1 GTGGAGCCCGGCATC 15


RESULT 957
AAF47144/c
ID   AAF47144 standard; DNA; 15 BP.
XX
AC   AAF47144;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #564.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 47; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        322 TGCTGGCGGCGGACG 336
              ||||||  | ||||||
Db         15 TGCTGGAGACGGACG 1


RESULT 958
AAF50342
ID   AAF50342 standard; DNA; 15 BP.
XX
AC   AAF50342;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1302.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
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```
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 69; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        404 CTTCTACGTGATCGA 418
              |||||||||  ||||
Db          1 CTTCTACGTCCTCGA 15


RESULT 959
AAF47290
ID   AAF47290 standard; DNA; 15 BP.
XX
AC   AAF47290;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #710.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 48; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        171 TACTACGAGTCCAAG 185
              | || ||||||||||
Db          1 TCCTCCGAGTCCAAG 15


RESULT 960
AAF52600
ID   AAF52600 standard; DNA; 15 BP.
XX
AC   AAF52600;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #3560.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 84; 201pp; English.
XX
```

CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 0 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 240 GGCTGCTTCCCGGGC 254
||||||| |||| ||
Db 1 GGCTGCTGCCCGTGC 15

RESULT 961
AAF47145/c
ID AAF47145 standard; DNA; 15 BP.
XX
AC AAF47145;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #565.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 7; Page 47; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 321 GTGCTGGCGGCGGAC 335
||||||| | |||||
Db 15 GTGCTGGAGACGGAC 1

RESULT 962
AAF45774
ID AAF45774 standard; DNA; 15 BP.
XX
AC AAF45774;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP2 oligonucleotide #613.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 6; Page 38; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-

```
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 4 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         87 GTGGACATCACCACG 101
              ||||||| ||||| |
Db          1 GTGGACAGCACCATG 15


RESULT 963
AAF46991
ID   AAF46991 standard; DNA; 15 BP.
XX
AC   AAF46991;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #411.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 46; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        108 CGCGACCGCAGCAAG 122
              ||||||||| ||| |
Db          1 CGCGACCGCTGCAGG 15


RESULT 964
AAF47146/c
ID   AAF47146 standard; DNA; 15 BP.
XX
AC   AAF47146;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #566.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 7; Page 47; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
```

```
SQ   Sequence 15 BP; 2 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        320 CGTGCTGGCGGCGGA 334
              ||||||| | ||||
Db         15 CGTGCTGGAGACGGA 1


RESULT 965
AAF51317
ID   AAF51317 standard; DNA; 15 BP.
XX
AC   AAF51317;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #2277.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 75; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 5 A; 6 C; 3 G; 1 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         86 AGTGGACATCACCAC 100
              ||||| || ||||||
Db          1 AGTGGCCAACACCAC 15


RESULT 966
ABN87915/c
ID   ABN87915 standard; DNA; 15 BP.
XX
AC   ABN87915;
XX
DT   12-AUG-2002  (first entry)
XX
DE   Human GSR allele specific oligonucleotide primer SEQ ID NO:34.
XX
KW   Human; glutathione reductase; GSR; enzyme; haemolytic anaemia; SNP;
KW   gene therapy; antianaemic; polymorphic; single nucleotide polymorphism;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    14
FT                   /*tag=  a
FT                   /note= "polymorphic base"
XX
PN   WO200242320-A2.
XX
PD   30-MAY-2002.
XX
PF   13-NOV-2001; 2001WO-US046473.
XX
PR   10-NOV-2000; 2000US-0247202P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Bieglecki KM,  Sanchis A,  Sausker EA,  Sun X;
XX
DR   WPI; 2002-471719/50.
XX
PT   New genetic variants of Glutathione reductase isogenes, useful for
PT   improving efficiency and reliability in drug development for treating
PT   hemolytic anemia.
XX
PS   Claim 14; Page 14; 137pp; English.
XX
CC   The present invention describes genetic variants of the human glutathione
CC   reductase (GSR) gene (I). (I) has antianaemic activity and can be used in
CC   gene therapy. (I) can be used in screening for drugs targeting (I) that
CC   are useful for treating haemolytic anaemia. Methods from the present
CC   invention can be used: for improving the efficiency and reliability of
CC   several steps in the discovery and development of drugs for treating
CC   diseases associated with GSR activity; for haplotyping, which is also
CC   used by the pharmaceutical research scientist to validate GSR as a
CC   candidate target for treating a specific condition or disease predicted
CC   to be associated with GSR activity, e.g. haemolytic anaemia, and in the
CC   design of clinical trials for treating a specific condition of disease
CC   associated with GSR activity; and for screening compounds targeting GSR.
CC   (I) is useful in studying the expression and function of GSR, and in
CC   expressing GSR protein for use in screening for candidate drugs to treat
CC   diseases related to GSR activity. (I) is also useful in studying the
CC   effect of the variation on the biological activity of GSR as well as on
CC   the binding affinity of candidate drugs targeting GSR for the treatment
CC   of haemolytic anaemia. The present sequence represents an allele specific
CC   oligonucleotide (ASO) primer for the human GSR gene, which is given in
CC   the exemplification of the present invention. N.B. The polymorphic base
CC   (showing a single nucleotide polymorphism) in the ASO primer is shown
CC   using an IUPAC ambiguity code (as given in the present invention)
XX
SQ   Sequence 15 BP; 1 A; 9 C; 4 G; 0 T; 0 U; 1 Other;
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  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        321 GTGCTGGCGGCGGAC 335
              | ||||||||||| |
Db         15 GRGCTGGCGGCGGGC 1


RESULT 967
ABK32383
ID   ABK32383 standard; DNA; 15 BP.
XX
AC   ABK32383;
XX
DT   23-APR-2002  (first entry)
XX
DE   Human colon cancer SAGE tag #484.
XX
KW   Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
KW   serial analysis of gene expression; diagnostic; prognostic; probe;
KW   cancer marker; ss.
XX
OS   Homo sapiens.
XX
PN   US6333152-B1.
XX
PD   25-DEC-2001.
XX
PF   20-MAY-1998;   98US-00081646.
XX
PR   20-MAY-1998;   98US-00081646.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Vogelstein B,  Kinzler KW,  Zhang L,  Zhou W;
XX
DR   WPI; 2002-153821/20.
XX
PT   New human nucleic acid containing specific SAGE tags, useful as
PT   diagnostic markers for cancer, also derived probes.
XX
PS   Disclosure; Col 55; 161pp; English.
XX
CC   The invention relates to an isolated, purified human nucleic acid (I)
CC   that has the same sequence as a mRNA found in humans and is a SAGE
CC   (serial analysis of gene expression) tag comprising a single stranded
CC   probe containing at least 10 consecutive nucleotides. SAGE tags, are
CC   diagnostic and prognostic markers of cancer, especially of the colon and
CC   pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer
CC   SAGE tags of the invention
XX
SQ   Sequence 15 BP; 4 A; 1 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        287 CAAGCTGGTGAAGGA 301
              || | ||||||||||
Db          1 CATGTTGGTGAAGGA 15


RESULT 968
ABK32629
ID   ABK32629 standard; DNA; 15 BP.
XX
AC   ABK32629;
XX
DT   23-APR-2002  (first entry)
XX
DE   Human pancreatic cancer SAGE tag #181.
XX
KW   Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
KW   serial analysis of gene expression; diagnostic; prognostic; probe;
KW   cancer marker; ss.
XX
OS   Homo sapiens.
XX
PN   US6333152-B1.
XX
PD   25-DEC-2001.
XX
PF   20-MAY-1998;   98US-00081646.
XX
PR   20-MAY-1998;   98US-00081646.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Vogelstein B,  Kinzler KW,  Zhang L,  Zhou W;
XX
DR   WPI; 2002-153821/20.
XX
PT   New human nucleic acid containing specific SAGE tags, useful as
PT   diagnostic markers for cancer, also derived probes.
XX
PS   Disclosure; Col 83; 161pp; English.
XX
CC   The invention relates to an isolated, purified human nucleic acid (I)
CC   that has the same sequence as a mRNA found in humans and is a SAGE
CC   (serial analysis of gene expression) tag comprising a single stranded
CC   probe containing at least 10 consecutive nucleotides. SAGE tags, are
CC   diagnostic and prognostic markers of cancer, especially of the colon and
CC   pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer
CC   SAGE tags of the invention
XX
SQ   Sequence 15 BP; 4 A; 1 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 3.8e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        287 CAAGCTGGTGAAGGA 301
              || | ||||||||||
Db          1 CATGTTGGTGAAGGA 15


RESULT 969
ABK81782/c
ID   ABK81782 standard; DNA; 15 BP.
XX
AC   ABK81782;
XX
DT   13-AUG-2002  (first entry)
XX
DE   Human CHRM5 gene polymorphism detection ASO primer #8.
XX
KW   Human; cholinergic receptor muscarinic 5; CHRM5; genotyping; haplotyping;
KW   single nucleotide polymorphism; SNP; allele-specific oligonucleotide;
KW   ASO; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200232924-A2.
XX
PD   25-APR-2002.
XX
PF   11-OCT-2001; 2001WO-US032022.
XX
PR   19-OCT-2000; 2000WO-US029071.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Bieglecki KM,  Chew A,  Choi JY,  Denton RR,  Nandabalan K;
PI   Sausker EA,  Stephens JC;
XX
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DR WPI; 2002-435523/46.
XX
PT Novel cholinergic receptor, muscarinic 5 polynucleotide useful
PT therapeutically and in screening for candidate drug to treat diseases
PT related to the receptor activity.
XX
PS Claim 14; Page 13; 72pp; English.
XX
CC The present invention relates to a new cholinergic receptor, muscarinic 5
CC (CHRM5) polynucleotide comprising a sequence which is a polymorphic
CC variant for a reference sequence for the CHRM5 gene or its fragment, or a
CC polymorphic variant of a reference sequence for a CHRM5 cDNA or its
CC fragment. The invention is useful in drug screening assays. The molecules
CC of the invention are useful in studying the expression and function of
CC CHRM5, and in expressing CHRM5 protein for use in screening for candidate
CC drugs to treat diseases related to CHRM5 activity. The methods of the
CC invention are useful in developing diagnostic tests and therapeutic
CC treatments. The method is also useful in the design of clinical trials of
CC candidate drugs for treating specific condition or disease associated
CC with CHRM5 activity and is useful in determining whether an individual
CC has one of the haplotypes or one of the haplotype pairs. The invention is
CC useful in a variety of diagnostic and prognostic formats and therapeutic
CC methods. The invention is also useful in genotyping and/or haplotyping
CC the CHRM5 gene in an individual. The present nucleic acid sequence
CC represents one of a collection of allele-specific oligonucleotide (ASO)
CC primers (ABK81775-ABK81794) that were used in the invention to detect
CC polymorphisms in the human CHRM5 gene
XX
SQ Sequence 15 BP; 2 A; 6 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 230 CAAATCGGGAGGCTG 244
| | |||||||||||
Db 15 CYACTCGGGAGGCTG 1

RESULT 970
ABZ76557
ID ABZ76557 standard; DNA; 15 BP.
XX
AC ABZ76557;
XX
DT 29-APR-2003 (first entry)
XX
DE Lactobacillus brevis PCR primer ORF4 SEQ ID NO:60.
XX
KW Lactobacillus brevis; beer turbidity; beer clouding; beer; detection;
KW lactic acid bacteria; brewing; probe; PCR primer; ss.
XX
OS Lactobacillus brevis.
XX
PN WO200295028-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2002; 2002WO-JP005022.
XX
PR 23-MAY-2001; 2001JP-00154085.
XX
PA (KIRI) KIRIN BEER KK.
XX
PI Fujii T;
XX
DR WPI; 2003-120803/11.
XX
PT Polynucleotide probes and primers for detecting beer-clouding lactic acid
PT bacteria, for quality control during beer production applicable in
PT brewing industry.
XX
PS Claim 7; Page 31; 94pp; Japanese.
XX
CC The present invention describes a polynucleotide probe, or primer, for
CC detecting beer-clouding lactic acid bacteria containing a nucleotide
CC sequence of (I) with 8056 base pairs (see ABZ76501), or a nucleotide made
CC from not less than 15 nucleotides hybridisable with its complementary
CC sequence. Probes and primers from the present invention can be used for
CC detecting beer-clouding lactic acid bacteria (Lactobacillus brevis) for
CC quality control during beer production, which is applicable in the
CC brewing industry. The present sequence represents a PCR primer for
CC Lactobacillus brevis which is used in the exemplification of the present
CC invention
XX
SQ Sequence 15 BP; 4 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 224 GGCGGCCAAATCGGG 238
||| ||||||||| |
Db 1 GGCAGCCAAATCGTG 15

RESULT 971
ABX76536/c
ID ABX76536 standard; DNA; 15 BP.
XX
AC ABX76536;
XX
DT 01-APR-2003 (first entry)
XX
DE M. avium 23S rRNA probe #19.
XX
KW Probe; 23S rRNA; 16SrRNA; tuberculosis; MTC; MOTT; peptide nucleic acid;
KW mycobacterium tuberculosis complex; precursor rRNA; rDNA; 5S rRNA; ss;
KW mycobacterium other than tuberculosis.
XX
OS Mycobacterium avium.
XX
PN US2002137035-A1.
XX
PD 26-SEP-2002.
XX
PF 07-APR-2000; 2000US-00544934.
XX
PR 07-APR-2000; 2000US-00544934.
XX
PA (STEN/) STENDER H.
PA (LUND/) LUND K.
PA (MOLL/) MOLLERUP T A.
XX
PI Stender H, Lund K, Mollerup TA;
XX
DR WPI; 2003-174116/17.
XX
PT Peptide nucleic acid probes for detecting target sequences of
PT Mycobacteria in samples, e.g., sputum, which are capable of hybridizing
PT to a target sequence of mycobacterial rDNA, precursor rRNA or rRNA
PT forming detectable hybrids.
XX
PS Claim 22; Page 39; 74pp; English.
XX
CC The invention relates to a peptide nucleic acid capable of hybridising to
CC a target sequence of Mycobacterial rDNA, precursor rRNA or rRNA (5S, 16S
CC or 23S) forming detectable hybrids. Also included are detecting a target
CC sequence of mycobacteria in a sample comprising contacting rRNA or rDNA
CC in the sample with peptide nucleic acid probes (hybridisation takes place
CC between the probe and the rRNA or rDNA), observing or measuring any
CC formed detectable hybrids and relating the observation or measurement to
CC the presence of a target sequence of mycobacteria in the sample, and a
CC kit for detecting a target sequence of mycobacteria in particular a
CC target sequence of mycobacteria of M. tuberculosis complex (MTC). The
CC probes are used for detecting a target sequence of MTC (and

CC distinguishing them from mycobacterium other than tuberculosis, MOTT)
CC present in a sample, e.g. sputum, laryngeal swabs, gastric lavage,
CC bronchial washings, biopsies, aspirates, expectorates, body fluids,
CC urine, tissue sections as well as food samples, soil, air and water
CC samples and their cultures. The probe is able to penetrate the cell wall
CC of the mycobacteria. It is able to hybridise to Mycobacterial precursor
CC rRNA and rRNA without harsh treatment of the mycobacterial cells,
CC therefore avoiding a risk of interfering with the morphology of the
CC cells. The present sequence is an M. avium probe for 16S or 23S rRNA
XX
SQ Sequence 15 BP; 2 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 13 AACTGCGGGTGACCG 27
|| |||||||||||
Db 15 AGCTCCGGGTGACCG 1

RESULT 972
ADE36720
ID ADE36720 standard; DNA; 15 BP.
XX
AC ADE36720;
XX
DT 29-JAN-2004 (first entry)
XX
DE DE3-1 plasmid construction related oligonucleotide SEQ ID NO:9.
XX
KW neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer;
KW human; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003080835-A1.
XX
PD 02-OCT-2003.
XX
PF 26-MAR-2003; 2003WO-CN000217.
XX
PR 26-MAR-2002; 2002CN-00116259.
XX
PA (ZENS-) ZENSUN SHANGHAI SCI TECH LTD.
XX
PI Zhou M;
XX
DR WPI; 2003-876924/81.
XX
PT Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or
PT their fragments, for treating, preventing or delaying neoplasms (e.g.
PT urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovary
PT or colon cancer).
XX
PS Example; SEQ ID NO 9; 68pp; English.
XX
CC The present invention describes a method for treating, preventing or
CC delaying neoplasm in a mammal. The method comprises administering an ErbB
CC -3 protein, a nucleic acid encoding an ErbB-3 protein, or their
CC functional fragments, where an immune response is generated against the
CC neoplasm. ErbB-3 has cytostatic activity, and can be used in gene
CC therapy. The method is useful for treating, preventing or delaying
CC neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder,
CC bone, brain, breast, buccal, central nervous system, cervix, colon, ear,
CC endometrium, oesophagus, eye, eyelids, fallopian tube, gastrointestinal
CC tract, head and neck, heart, kidney, larynx, liver, lung, mandible,
CC mandibular condyle, maxilla, mouth, nasopharynx, nose, oral cavity,
CC ovary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland,
CC rectum, retina, salivary glands, skin, small intestine, spinal cord,
CC stomach, testes, thyroid, tonsil, urethra, uterus, vagina,
CC vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary,
CC stomach, prostate, colon and lung cancer). The present sequence
CC represents an oligonucleotide used in the construction of a plasmid
CC comprising ErbB-3, which is used in an example from the present
CC invention.
XX
SQ Sequence 15 BP; 6 A; 4 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 384 GACGACGGCGCCAAG 398
||||||| || ||||
Db 1 GACGACGACGACAAG 15

RESULT 973
AAQ65877
ID AAQ65877 standard; DNA; 16 BP.
XX
AC AAQ65877;
XX
DT 25-MAR-2003 (revised)
DT 22-DEC-1994 (first entry)
XX
DE Type II procollagen sequencing primer 77.
XX
KW Type II procollagen; COL2A1; amplification; primer;
KW polymerase chain reaction; PCR; osteoarthritis; cartilage; ss.
XX
OS Synthetic.
XX
PN WO9411532-A1.
XX
PD 26-MAY-1994.
XX
PF 12-NOV-1993; 93WO-US010964.
XX
PR 13-NOV-1992; 92US-00977284.
XX
PA (UYJE-) UNIV JEFFERSON THOMAS.
XX
PI Prockop DJ, Ala-Kokko L, Williams CJ, Ritvaniemi P, Baldwin C;
PI Hopkinson I, Ahmad NN;
XX
DR WPI; 1994-183530/22.
XX
PT Detecting genetic pre-disposition to osteoarthritis - and other diseases
PT involving mutation in cartilage protein genes, by amplification and
PT analysis of DNA and comparison with standards.
XX
PS Claim 18; Page 29; 112pp; English.
XX
CC Claim 18 claims primers for use in detecting mutations in a mammalian
CC gene for a structural protein of cartilage comprising a sequence
CC identified in Table I (Page 18-31). Table I includes 179 primer sequences
CC (see AAQ65728-Q65906). The following details are given for primer 77:
CC Region/exon: 45 Direction: sense Primer position: 18572 (Updated on 25-
CC MAR-2003 to correct PN field.)
XX
SQ Sequence 16 BP; 4 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 4.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 61 AGTCTCTGCACTACG 75
||||||| |||| |
Db 2 AGTCTCTGGACTAAG 16

RESULT 974
AAT85365

```
ID   AAT85365 standard; DNA; 16 BP.
XX
AC   AAT85365;
XX
DT   10-DEC-1997  (first entry)
XX
DE   Antisense p-ethoxy oligonucleotide against leukaemia cells.
XX
KW   Human; acute lymphocytic leukaemia; ALL; Philadelphia chromosome;
KW   chronic myelogenous leukaemia; Abl; break point cluster region; Bcr;
KW   inhibition; tumour; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1. .16
FT                   /*tag=  a
FT                   /note= "P-ethoxy linkages"
XX
PN   WO9707784-A2.
XX
PD   06-MAR-1997.
XX
PF   26-AUG-1996;   96WO-US014146.
XX
PR   29-AUG-1995;   95US-00520385.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Lopez-Berestein G,  Tari AM;
XX
DR   WPI; 1997-178904/16.
XX
PT   Anti:sense oligo:nucleotide liposomal compsns. - comprise neutral
PT   phospholipid(s) with phospho:di:ester oligo:nucleotide(s),
PT   phosphoro:thioate oligo:nucleotide(s) or p-ethoxy oligo:nucleotide(s).
XX
PS   Claim 7; Page 19; 26pp; English.
XX
CC   A novel liposomal composition of antisense oligonucleotides has been
CC   developed. The composition comprises: (a) a liposome which consists
CC   entirely of neutral phospholipids; and (b) an antisense oligonucleotide
CC   that is entrapped in the liposome and is selected from phosphodiester
CC   oligonucleotides, phosphorothioate oligonucleotides, and p-ethoxy
CC   oligonucleotides. The present sequence represents a specifically claimed
CC   antisense p-ethoxy oligonucleotide against Bcr exon 1/Abl exon 2 (B1/A2)
CC   found in human acute lymphocytic leukaemia cells. The compositions are
CC   used particularly for inhibiting the growth of tumour cells. The
CC   compositions minimise nuclease hydrolysis of the oligonucleotides and
CC   also result in increased cellular uptake and intracellular delivery of
CC   the antisense oligonucleotides. The compositions also enhance the
CC   incorporation of oligonucleotides in the liposomes compared to known
CC   liposomal formulations
XX
SQ   Sequence 16 BP; 2 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 4.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        398 GAAGGTCTTCTACGT 412
              ||||| ||||| |||
Db          1 GAAGGGCTTCTGCGT 15


RESULT 975
AAV66874/c
ID   AAV66874 standard; RNA; 16 BP.
XX
AC   AAV66874;
XX
DT   18-JAN-1999  (first entry)
XX
DE   Oligonucleotide for the last 16 nucleotides of K2.
XX
KW   Human; tissue plasminogen activator; t-PA; chimeric gene assembly;
KW   manipulation; ribozyme; intron-mediated recombinant technique; cleavage;
KW   ligation; trans-splicing; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9840519-A1.
XX
PD   17-SEP-1998.
XX
PF   11-MAR-1998;   98WO-US004881.
XX
PR   11-MAR-1997;   97US-00814412.
XX
PA   (UYBO-) UNIV BOSTON.
XX
PI   Jarrell KA;
XX
DR   WPI; 1998-531526/45.
XX
PT   Manipulation of nucleic acids - using intron sequences to mediate
PT   specific cleavage and ligation of discontinuous nucleic acid molecules by
PT   trans-splicing.
XX
PS   Example 1; Page 36; 160pp; English.
XX
CC   A method has been developed for producing a recombinant DNA molecule. The
CC   method comprises: (a) providing a first DNA/RNA hybrid molecule
CC   comprising a first DNA linked to a first splicing component; (b)
CC   providing a second DNA/RNA hybrid molecule comprising a second DNA linked
CC   to a second splicing component, which second splicing component is
CC   selected so that, when the first and second DNA/RNA hybrid molecules are
CC   admixed together, trans-splicing between the first and second splicing
CC   component covalently links the first DNA with the second DNA to form a
CC   single, recombinant DNA molecule; and (c) admixing the first and second
CC   DNA/RNA hybrid molecules together so that the recombinant DNA molecule is
CC   produced by trans-splicing. The method can be used for the manipulation
CC   of nucleic acids. Novel genes and gene products can be generated by
CC   admixing nucleic acid constructs comprising exon nucleic acid sequences
CC   flanked by intron sequences that can direct trans-splicing of the exon
CC   sequences to each other. The flanking intronic sequences, by
CC   intermolecular complementation between the flanking intron sequences of
CC   two different constructs, form a functional intron which mediates the
CC   transesterification reactions necessary to cause the ligation of the
CC   discontinuous nucleic acid sequences to one another, and thereby generate
CC   a recombinant gene comprising the ligated exons. The present sequence
CC   represents an oligonucleotide used in an example from the present
CC   invention
XX
SQ   Sequence 16 BP; 0 A; 8 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 4.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        272 GGAGCAGGGCGGCAC 286
              ||||||| |||||
Db         16 GGAGCAGGAGGGCAC 2


RESULT 976
AAX09083
ID   AAX09083 standard; DNA; 16 BP.
XX
AC   AAX09083;
XX
DT   14-JUN-1999  (first entry)
XX
DE   Tumour necrosis factor alpha antisense oligonucleotide.
XX
```

KW Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO;
KW inhibition; expresssion; treatment; disease; disorder; ss.
XX
OS Synthetic.
XX
PN WO9901139-A1.
XX
PD 14-JAN-1999.
XX
PF 02-JUL-1998; 98WO-US013711.
XX
PR 03-JUL-1997; 97US-0051705P.
XX
PA (UYJE-) UNIV JEFFERSON THOMAS.
XX
PI Tu G, Israel Y;
XX
DR WPI; 1999-105767/09.
XX
PT Generation of antisense oligonucleotides - by specifically targeting a
PT GGGA motif found in mRNA sequences.
XX
PS Example 2; Page 37; 55pp; English.
XX
CC Antisense oligonucleotides (ASO) for inhibiting a tumour necrosis factor-
CC alpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50
CC nucleotides, 90% of which are complementary to a region of mRNA
CC containing a GGGA sequence motif. The ASO is used to inhibit expression
CC of a gene in an animal and for treating the animal when afflicted with a
CC disease or disorder characterised by the presence of an mRNA from a gene
CC containing a GGGA motif. The ASO are specifically targeted to a GGGA
CC sequence motif found in mRNA from a gene. A study of known ASO has shown
CC that at least half of the most efficacious ASO's contain one or more TCCC
CC motifs. This ASO comprises a TCCC motif followed by a cytosine residue
CC and corresponds to a region of the 1.19CAT 5' untranslated region
XX
SQ Sequence 16 BP; 3 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 4.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 305 GAGCCCCGGGGACCG 319
|| ||||||| ||||
Db 1 GATCCCCGGGTACCG 15

RESULT 977
AAA13286/c
ID AAA13286 standard; RNA; 16 BP.
XX
AC AAA13286;
XX
DT 24-JUL-2000 (first entry)
XX
DE Kringle domain 2 (K2) nucleotide sequence.
XX
KW Recombinant nucleic acid production; combinatorial gene library;
KW ordered gene assembly; trans-splicing; tissue plasminogen activator;
KW kringle domain; K2; ss.
XX
OS Synthetic.
XX
PN WO200017342-A2.
XX
PD 30-MAR-2000.
XX
PF 21-SEP-1999; 99WO-US021929.
XX
PR 21-SEP-1998; 98US-0101328P.
PR 20-SEP-1999; 99US-00101328.
XX
PA (UYBO-) UNIV BOSTON.
XX
PI Jarrell KA, Mulcheeva S, Donahue W;
XX
DR WPI; 2000-303208/26.
XX
PT In vivo production of nucleic acid, useful e.g. for producing
PT combinatorial gene libraries or ribozymes, by trans-splicing two RNAs
PT containing exon and intron component.
XX
PS Example 1; Page 40; 186pp; English.
XX
CC This sequence represents a kringle domain (K2) nucleotide sequence. K2 is
CC used in an example of the method of the invention, which demonstrates the
CC use of engineered ribozymes to catalyse chimeric gene assembly. The
CC present invention relates to the in vivo production of recombinant
CC nucleic acid sequences. The method comprises expressing in a cell, two
CC transcripts, one containing a first exon and first intron component, and
CC a second transcript comprising a second intron component and a second
CC exon. Transcript 1 and transcript 2 are allowed to trans-splice, forming
CC a product containing exon 1 and exon 2, but not the intron components.
CC The invention makes use of the ability of intronic sequences derived from
CC group I or group II introns to mediate specific cleavage and ligation of
CC discontinuous nucleic acid molecules. The method is used to produce
CC recombinant nucleic acids, their products, or ribozymes in vivo. The
CC method is preferably used for the preparation of combinatorial gene
CC libraries in which the order and composition of exons are random. The
CC method is also used for ordered gene assembly, or for the assembly of
CC genes ordered at some exons but randomized at others. New genes can be
CC selected rapidly and efficiently, and a very wide range of exons may be
CC trapped
XX
SQ Sequence 16 BP; 0 A; 8 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 4.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 GGAGCAGGGCGGCAC 286
|||||||| |||||
Db 16 GGAGCAGGAGGGCAC 2

RESULT 978
AAC63245/c
ID AAC63245 standard; DNA; 16 BP.
XX
AC AAC63245;
XX
DT 06-FEB-2001 (first entry)
XX
DE Oligonucleotide #18 used in a method for primer selection.
XX
KW PCR primer; nucleic acid amplification; melting temperature; T_m; ss.
XX
OS Homo sapiens.
XX
PN WO200060123-A2.
XX
PD 12-OCT-2000.
XX
PF 05-APR-2000; 2000WO-US008962.
XX
PR 06-APR-1999; 99US-0127891P.
XX
PA (GENO-) GENOME TECHNOLOGIES LLC.
XX
PI Senapathy P;
XX
DR WPI; 2000-656235/63.
XX
PT Determining Tm range for several degenerate primers with a fixed-sequence
PT and a degenerate-sequence portion for use in polymerase chain reaction
PT amplification by identifying a specific sequence in the nucleic acid

```
PT   template.
XX
PS   Disclosure; Fig 3A; 34pp; English.
XX
CC   The present invention relates to a method for selecting PCR primers for
CC   nucleic acid amplification. The method comprises determining the melting
CC   temperature (T_m) range for degenerate oligonucleotide primers with a
CC   fixed-sequence portion (FS) and a degenerate-sequence portion (DS) by
CC   searching known portion of a nucleic acid template for a sequence
CC   complementary to a desired FS of a primer. Nucleotide base pairs flanking
CC   or interspersed between the sequence complementary to a DS of one of the
CC   primers are detected and T_m is calculated. The method of the present
CC   invention allows primers which produce more efficient DNA amplification
CC   to be produced. The present sequence is a primer used in the method of
CC   the present invention
XX
SQ   Sequence 16 BP; 1 A; 11 C; 4 G; 0 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 4.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        142 TGGCGGTGGAGGCCG 156
              ||||||  || |||||
Db         15 TGGCGGCGGGGGCCG 1


RESULT 979
AAC63248/c
ID   AAC63248 standard; DNA; 16 BP.
XX
AC   AAC63248;
XX
DT   06-FEB-2001  (first entry)
XX
DE   Oligonucleotide #21 used in a method for primer selection.
XX
KW   PCR primer; nucleic acid amplification; melting temperature; T_m; ss.
XX
OS   Homo sapiens.
XX
PN   WO200060123-A2.
XX
PD   12-OCT-2000.
XX
PF   05-APR-2000; 2000WO-US008962.
XX
PR   06-APR-1999;   99US-0127891P.
XX
PA   (GENO-) GENOME TECHNOLOGIES LLC.
XX
PI   Senapathy P;
XX
DR   WPI; 2000-656235/63.
XX
PT   Determining Tm range for several degenerate primers with a fixed-sequence
PT   and a degenerate-sequence portion for use in polymerase chain reaction
PT   amplification by identifying a specific sequence in the nucleic acid
PT   template.
XX
PS   Disclosure; Fig 3A; 34pp; English.
XX
CC   The present invention relates to a method for selecting PCR primers for
CC   nucleic acid amplification. The method comprises determining the melting
CC   temperature (T_m) range for degenerate oligonucleotide primers with a
CC   fixed-sequence portion (FS) and a degenerate-sequence portion (DS) by
CC   searching known portion of a nucleic acid template for a sequence
CC   complementary to a desired FS of a primer. Nucleotide base pairs flanking
CC   or interspersed between the sequence complementary to a DS of one of the
CC   primers are detected and T_m is calculated. The method of the present
CC   invention allows primers which produce more efficient DNA amplification
CC   to be produced. The present sequence is a primer used in the method of
CC   the present invention
XX
SQ   Sequence 16 BP; 0 A; 10 C; 5 G; 1 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 4.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        305 GAGCCCCGGGGACCG 319
              ||| ||||||| |||
Db         15 GAGGCCCGGGGGCCG 1


RESULT 980
AAD22030
ID   AAD22030 standard; DNA; 16 BP.
XX
AC   AAD22030;
XX
DT   12-FEB-2002  (first entry)
XX
DE   Human sitosterolaemia susceptibility gene (SSG) exon5 5' splice site.
XX
KW   Human; sitosterolaemia susceptibility gene; SSG; atherosclerosis;
KW   sterol-related disorder; hyperlipidaemia; hypercholesterolaemia; therapy;
KW   gall stone; coronary heart disease; cardiovascular disease; arthritis;
KW   xanthoma; haemolytic anaemia; transgenic animal; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1. .9
FT                   /*tag=  a
FT                   /note= "Intron"
FT   misc_feature    10. .16
FT                   /*tag=  b
FT                   /note= "Exon"
XX
PN   WO200179272-A2.
XX
PD   25-OCT-2001.
XX
PF   18-APR-2001; 2001WO-US012758.
XX
PR   18-APR-2000; 2000US-0198465P.
PR   15-MAY-2000; 2000US-0204234P.
XX
PA   (TULA-) TULARIK INC.
XX
PI   Tian H,  Schultz J,  Shan B;
XX
DR   WPI; 2002-017598/02.
XX
PT   Novel sitosterolemia susceptibility gene polypeptide and polynucleotide,
PT   useful for screening a compound that increases the level of expression or
PT   activity of SSG polypeptide for treating sterol-related disorder.
XX
PS   Disclosure; Fig 14B; 105pp; English.
XX
CC   The invention relates to an isolated Sitosterolaemia Susceptibility Gene
CC   (SSG) polypeptide. SSG is a member of adenosine triphosphate (ATP)
CC   binding cassette (ABC) family cholesterol transporter. SSG is useful for
CC   identifying a compound useful in the treatment or prevention of a sterol-
CC   related disorder, including sitosterolaemia, hyperlipidaemia,
CC   hypercholesterolaemia, gall stones, HDL deficiency, atherosclerosis or
CC   nutritional deficiencies. SSG is also useful for treating cholesterol-
CC   associated diseases or conditions including coronary heart disease and
CC   other cardiovascular diseases, and sitosterolaemia-associated condition
CC   including arthritis, xanthomas and chronic haemolytic anaemia. SSG
CC   expression cassette is useful in the production of transgenic non-human
CC   animals. SSG genes and their homologues are useful as tools for a number
CC   of applications including diagnosing sitosterolaemia and other
CC   cardiovascular disorders, for forensics and paternity determinations, and
CC   for treating any of a large number of SSG associated diseases. The
```

```
CC   present sequence is human SSG exon splice site
XX
SQ   Sequence 16 BP; 2 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 4.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        142 TGGCGGTGGAGGCCG 156
              ||  ||||||||||
Db          1 TGCAGGTGGAGGCCG 15


RESULT 981
ABL31248
ID   ABL31248 standard; DNA; 16 BP.
XX
AC   ABL31248;
XX
DT   21-MAR-2002  (first entry)
XX
DE   Human HLA genotyping oligonucleotide SEQ ID NO 737.
XX
KW   Human; human leukocyte antigen; HLA; genotype; polymorphism;
KW   immunogenetic; transplantation; genetic disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192572-A1.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-JP004662.
XX
PR   01-JUN-2000; 2000JP-00164798.
XX
PA   (NISN ) NISSHINBO IND INC.
PA   (SYST-) SYSTEM RES INC.
XX
PI   Inoko H,  Kagiya T,  Ichihara T,  Matsumura Y,  Moriya S,  Nishida M;
XX
DR   WPI; 2002-122074/16.
XX
PT   Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of
PT   individuals e.g. by determining immunogenetic differences when
PT   transplanting between them.
XX
PS   Claim 10; Page 233; 345pp; Japanese.
XX
CC   The invention relates to a typing kit for judging human leukocyte antigen
CC   (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC   oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC   genes e.g. belonging to HLA class I antigens on human genome and
CC   containing gene polymorphisms as alloantigens have been immobilised as
CC   primers for amplification of cleaved nucleic acids relating to gene
CC   polymorphisms. The method is useful for judging HLA genotypes of
CC   individuals by determining immunogenetic differences before transplanting
CC   between them, providing genetic information to decide compatibility of
CC   organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC   pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC   diagnosis of genetic diseases and identifying individuals
XX
SQ   Sequence 16 BP; 2 A; 4 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 4.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        269 CCTGGAGCAGGGCGG 283
              ||||||||  |||||
Db          1 CCTGGAGCGAGGCGG 15


RESULT 982
ABN79955/c
ID   ABN79955 standard; DNA; 16 BP.
XX
AC   ABN79955;
XX
DT   15-JUL-2002  (first entry)
XX
DE   Human CYP2D6 gene sequencing primer A182FS.
XX
KW   Human; single nucleotide polymorphism; nucleic acid typing;
KW   tissue typing; sequencing; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200220837-A2.
XX
PD   14-MAR-2002.
XX
PF   10-SEP-2001; 2001WO-GB004042.
XX
PR   08-SEP-2000; 2000GB-00022069.
XX
PA   (PYRO-) PYROSEQUENCING AB.
PA   (STRD ) UNIV LELAND STANFORD JUNIOR.
PA   (GARD/) GARDNER R.
XX
PI   Ronaghi M,  Ekstroem B,  Pourmand N;
XX
DR   WPI; 2002-393849/42.
XX
PT   Typing nucleic acid for obtaining information about several variable
PT   sites involves simultaneously or sequentially performing two or more
PT   primer extension reactions, and determining the pattern of nucleotide
PT   incorporation.
XX
PS   Example 5; Page 59; 86pp; English.
XX
CC   The invention relates to a novel method for obtaining typing information
CC   about several variable sites within target nucleic acid, or typing one or
CC   more nucleic acid molecules. The methods of the invention are useful for
CC   typing one or more nucleic acid molecules containing two or more variable
CC   sites, preferably nucleic acid molecules containing three or more
CC   variable sites are typed, where three or more primer extension reactions
CC   are performed. The method is also useful for diagnosis of pathological
CC   conditions characterized by the presence of specific nucleic acid
CC   molecule(s). The methods are particularly suited for identifying
CC   microbial species or their subtypes, and in typing procedures e.g. typing
CC   of polymorphisms, tissue typing or in clinical applications. The sequence
CC   represents a PCR primer used to sequence fragment 61118 of the CYP2D6
CC   gene, which is a member of the cytochrome P450 gene superfamily
XX
SQ   Sequence 16 BP; 5 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 4.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        353 CTACAGCGACTTCCT 367
              || |||||||||| |
Db         16 CTCCAGCGACTTCTT 2


RESULT 983
ABX04806/c
ID   ABX04806 standard; DNA; 16 BP.
XX
AC   ABX04806;
XX
DT   15-JAN-2003  (first entry)
XX
DE   Guanylate kinase gene associated oligonucleotide #22.
XX
```

KW Herpesviridae; thymidine kinase; TK; DRH nucleoside binding region;
KW viral inhibitor; bacterial inhibitor; parasite inihibitor; tumour;
KW autoreactive immune cell; cancer; hyperkeratosis; psoriasis;
KW prostate hypertrophy; hyperthyroidism; endocrinopathy; allergy;
KW autoimmune disease; restenosis; viral disease; AIDS; hepatitis; HCV; HBV;
KW acquired immunodeficiency syndrome; intracellular parasitic disease;
KW gene therapy; adenosine deaminase deficiency; Alzheimer's disease; ss;
KW guanylate kinase.
XX
OS Mus sp.
XX
PN US6451571-B1.
XX
PD 17-SEP-2002.
XX
PF 17-MAR-1999; 99US-00270956.
XX
PR 02-MAY-1994; 94US-00237592.
PR 02-MAY-1995; 95US-00432871.
PR 02-NOV-1995; 95US-00552304.
XX
PA (UNIW) UNIV WASHINGTON.
XX
PI Loeb LA, Black ME;
XX
DR WPI; 2003-045581/04.
XX
PT Novel Herpesviridae thymidine kinase mutant useful for inhibiting
PT pathogens e.g. viruses, bacteria, tumor in animals, has one or more
PT mutations encoding amino acid substitutions upstream from the DRH
PT nucleoside binding site.
XX
PS Example 9; Col 48; 78pp; English.
XX
CC The invention describes an isolated Herpesviridae thymidine kinase (TK)
CC comprising a 12 amino acid (aa) nucleoside binding region having a site 3
CC made up of a DRH nucleoside binding site and a site 4 and mutation(s), at
CC least one of the mutations being an aa substitution 2 or 3 aa upstream or
CC 5 or more aa downstream from the DRH motif that increases a biological
CC activity, preferably ability of TK to phosphorylate a nucleoside
CC analogue, as compared to unmutated TK. TK mutants are useful for
CC inhibiting a pathogenic agent such as viruses, bacteria, parasites,
CC tumour cells or autoreactive immune cells in a warm-blooded animal. TK
CC mutant is useful for inhibiting a tumour or cancer in a warm-blooded
CC animal, for treating a variety of disease e.g., hyperkeratosis
CC (psoriasis), prostate hypertrophy, hyperthyroidism, endocrinopathies,
CC autoimmune diseases, allergies, restenosis, viral diseases such as
CC acquired immunodeficiency syndrome (AIDS) hepatitis (HCV or HBV),
CC intracellular parasitic diseases, and to correct aberrant expression of a
CC gene within a cell, or to replace a specific gene which is defective in
CC proper expression using gene therapy, e.g. including adenosine deaminase
CC deficiency, and Alzheimer's diseases. The mutants are utilised as a
CC conditionally lethal marker for homologous recombination. This sequence
CC represents an oligonucleotide used in the isolation, purification and
CC characterisation of guanylate kinase
XX
SQ Sequence 16 BP; 2 A; 10 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 4.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 139 GCCTGGCGGTGGAGG 153
||||||.|||||.||
Db 16 GCCTGGAGGTGGGGG 2

RESULT 984
ACD82537/c
ID ACD82537 standard; DNA; 16 BP.
XX
AC ACD82537;
XX
DT 19-SEP-2003 (first entry)
XX
DE Nucleic acid cloning associated adaptor molecule #238.
XX
KW Adaptor molecule; nucleic acid cloning; nucleic acid ligating;
KW internal deletion mutagenesis analysis; cloning vehicle; ss.
XX
OS Synthetic.
XX
PN US2003044791-A1.
XX
PD 06-MAR-2003.
XX
PF 13-JUN-2001; 2001US-00880313.
XX
PR 13-JUN-2001; 2001US-00880313.
XX
PA (FLEM/) FLEMINGTON E K.
XX
PI Flemington EK;
XX
DR WPI; 2003-521745/49.
XX
PT New adaptor molecules, useful for cloning nucleic acid molecules that
PT does not require the design and synthesis of oligonucleotides or PCR
PT primers.
XX
PS Claim 12; Fig 5; 100pp; English.
XX
CC The invention describes adaptor molecules, where each end of the adaptor
CC is compatible with a nucleic acid digested with a restriction enzyme or a
CC nucleic acid comprising an end that is compatible with a nucleic acid
CC digested with a restriction enzyme. The adaptor molecules, compositions,
CC kits and arrays are useful for cloning nucleic acid molecules that does
CC not require the design and synthesis of oligonucleotides or PCR primers.
CC The adaptors, kits and arrays are also useful for ligating two ends of a
CC single nucleic acid molecule, or ligating two or more nucleic acid
CC molecules. The kits can also be used for performing internal deletion
CC mutagenesis analysis. The adaptor molecules are ligated to a cloning
CC vehicle, making the cloning procedure more rapid and efficient, and less
CC error-prone. This sequence represents a nucleic acid cloning associated
CC adaptor molecule
XX
SQ Sequence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 4.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 278 GGGCGGCACCAAGCT 292
||||.|||.||||||
Db 15 GGGCTGCAGCAAGCT 1

RESULT 985
AAQ47568
ID AAQ47568 standard; cDNA to mRNA; 17 BP.
XX
AC AAQ47568;
XX
DT 25-MAR-2003 (revised)
DT 26-JAN-1994 (first entry)
XX
DE Specific B type jun gene probe.
XX
KW quantification; human; GTP binding protein; G protein; alpha subunit;
KW specific mRNA; detection; hybridisation; diagnosis; pathophysiology;
KW disease state; hereditary; cancer; infectious; osteodystrophy;
KW pituitary tumour; acromegaly; melanoma cells; diabetes; PCR;
KW polymerase chain reaction; ss.
XX
OS Synthetic.
XX

PN WO9315221-A1.
XX
PD 05-AUG-1993.
XX
PF 29-JAN-1993; 93WO-US000977.
XX
PR 29-JAN-1992; 92US-00827208.
PR 24-MAR-1992; 92US-00857059.
PR 12-NOV-1992; 92US-00974409.
XX
PA (HITB) HITACHI CHEM CO LTD.
PA (HITB) HITACHI CHEM RES CENT INC.
XX
PI Akitaya T, Cooper A, Mitsuhashi M;
XX
DR WPI; 1993-258695/32.
XX
PT Quantitating messenger RNA in sample - using immobilised-polynucleotide
PT having sequence complementary to sequence unique to the MRNA.
XX
PS Example 9; Page 67; 177pp; English.
XX
CC The sequence is that of a specific B type jun gene probe which was used
CC in the method of the invention for the detection and quantification of
CC mRNAs in a sample without the need to purify the mRNA from cells. The
CC claimed method comprises identifying a polynucleotide sequence unique to
CC the mRNA, and immobilising an oligomer complementary to this sequence to
CC an insoluble support. The sample is then incubated with the insoluble
CC support such that the unique sequence will hybridise to the bound
CC oligomer and be immobilised. Non-immobilised components are washed from
CC the support and bound RNA is labelled in such a way that the label is
CC incorporated onto the support relative to the amount of mRNA on the
CC support. The amount of bound label is then determined. This method can be
CC used for the reliable, rapid, simultaneous quantification of multiple
CC varieties of mRNA. It may be used for diagnosing and recognition of
CC pathophysiology of various disease states, eg. hereditary diseases,
CC cancer, and infectious diseases. G proteins are thought to be involved in
CC causing various disease states. A genetic deficiency of Gs protein is the
CC molecular basis of hereditary osteodystrophy. Pituitary tumours in
CC acromegalic patients have been shown to contain mutant Gs proteins. G
CC proteins are also involved in invasive and metastatic melanoma cells, and
CC diabetes. See also AAQ47381-666. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 17 BP; 2 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 217 ACTCGGTGGCGGCCA 231
||| |||||| ||||
Db 2 ACTTGGTGGCCGCCA 16

RESULT 986
AAQ47593/c
ID AAQ47593 standard; cDNA to mRNA; 17 BP.
XX
AC AAQ47593;
XX
DT 25-MAR-2003 (revised)
DT 26-JAN-1994 (first entry)
XX
DE Jun-B specific probe B-1258.
XX
KW quantification; human; GTP binding protein; G protein; alpha subunit;
KW specific mRNA; detection; hybridisation; diagnosis; pathophysiology;
KW disease state; hereditary; cancer; infectious; osteodystrophy;
KW pituitary tumour; acromegaly; melanoma cells; diabetes; PCR;
KW polymerase chain reaction; ss.
XX
OS Synthetic.

XX
PN WO9315221-A1.
XX
PD 05-AUG-1993.
XX
PF 29-JAN-1993; 93WO-US000977.
XX
PR 29-JAN-1992; 92US-00827208.
PR 24-MAR-1992; 92US-00857059.
PR 12-NOV-1992; 92US-00974409.
XX
PA (HITB) HITACHI CHEM CO LTD.
PA (HITB) HITACHI CHEM RES CENT INC.
XX
PI Akitaya T, Cooper A, Mitsuhashi M;
XX
DR WPI; 1993-258695/32.
XX
PT Quantitating messenger RNA in sample - using immobilised-polynucleotide
PT having sequence complementary to sequence unique to the MRNA.
XX
PS Example 9; Page 71; 177pp; English.
XX
CC The sequence is that of the jun-B specific probe B-1258 which may be used
CC in the detection of jun oncogenes. It was used in the method of the
CC invention for the detection and quantification of mRNAs in a sample
CC without the need to purify the mRNA from cells. The claimed method
CC comprises identifying a polynucleotide sequence unique to the mRNA, and
CC immobilising an oligomer complementary to this sequence to an insoluble
CC support. The sample is then incubated with the insoluble support such
CC that the unique sequence will hybridise to the bound oligomer and be
CC immobilised. Non-immobilised components are washed from the support and
CC bound RNA is labelled in such a way that the label is incorporated onto
CC the support relative to the amount of mRNA on the support. The amount of
CC bound label is then determined. This method can be used for the reliable,
CC rapid, simultaneous quantification of multiple varieties of mRNA. It may
CC be used for diagnosing and recognition of pathophysiology of various
CC disease states, eg. hereditary diseases, cancer, and infectious diseases.
CC G proteins are thought to be involved in causing various disease states.
CC A genetic deficiency of Gs protein is the molecular basis of hereditary
CC osteodystrophy. Pituitary tumours in acromegalic patients have been shown
CC to contain mutant Gs proteins. G proteins are also involved in invasive
CC and metastatic melanoma cells, and diabetes. See also AAQ47381-666.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 17 BP; 3 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 217 ACTCGGTGGCGGCCA 231
||| |||||| ||||
Db 16 ACTTGGTGGCCGCCA 2

RESULT 987
AAQ56954
ID AAQ56954 standard; DNA; 17 BP.
XX
AC AAQ56954;
XX
DT 14-MAY-2003 (revised)
DT 25-MAR-2003 (revised)
DT 01-SEP-1994 (first entry)
XX
DE pH 2.5 acid phosphatase probe oligo PHY-34 #3.
XX
KW Phytase; pH 2.5 acid phosphatase; A. niger; strain ALK0243; mineral;
KW liberation; phytate; plant material; feed treatment; animal; inositol;
KW enzyme mixture; hydrolysis; phosphate; phytic acid complex; ss.
XX
OS Synthetic.

XX
PN WO9403072-A1.
XX
PD 17-FEB-1994.
XX
PF 27-JUL-1993; 93WO-US007058.
XX
PR 31-JUL-1992; 92US-00925401.
XX
PA (PANL-) PANLABS INC.
PA (NEVA/) NEVALAINEN H K M.
PA (ALKO-) ALKO LTD.
XX
PI Paloheimo MT, Fagerstroem RB, Miettinen-Oinonen ASK, Turunen MK;
PI Rambosek JA, Piddington CS, Houston CS, Cantrell MA;
XX
DR WPI; 1994-065302/08.
XX
PT Nucleic acid encoding phytase and pH 2.5 acid phosphatase - Used to
PT produce the enzymes and enzyme mixts. for liberating minerals from
PT phytate, partic. for animal feed.
XX
PS Example 1; Page 31; 103pp; English.
XX
CC The sequences given in AAQ56948-59 are probes which were used in the
CC isolation of the pH 2.5 acid phosphatase (AP) from A. niger var. awamori
CC strain ALK0243. These probes are based on peptide #816 and #1110 (see
CC also AAR46235). The isolated sequences were used to transformed host
CC cells for the expression of the pH 2.5 AP protein. The pH 2.5 AP protein
CC can be used to liberate minerals from phytates in plant materials either
CC in vitro, ie, in feed treatment processes, or in vivo, ie. by
CC administering the enzymes to animals. This enzyme can be mixed to provide
CC a balanced enzyme mixture in which cooperative enzyme activity rapidly
CC and effectively catalyses the near complete hydrolysis of phytate to
CC inositol and free phosphate with releaese of minerals from the phytic
CC acid complex. (Updated on 25-MAR-2003 to correct PN field.) (Updated on
CC 14-MAY-2003 to correct PS field.)
XX
SQ Sequence 17 BP; 5 A; 6 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 359 CGACTTCCTCACTTT 373
| ||||||||| |||
Db 1 CCACTTCCTCAATTT 15

RESULT 988
AAQ89601
ID AAQ89601 standard; DNA; 17 BP.
XX
AC AAQ89601;
XX
DT 06-NOV-1995 (first entry)
XX
DE Kappa-casein DNA primer AA75-80B.
XX
KW Kappa-casein; milk protein; primer; polymerase chain reaction; PCR; ss.
XX
OS Synthetic.
XX
PN US5391497-A.
XX
PD 21-FEB-1995.
XX
PF 13-OCT-1992; 92US-00962569.
XX
PR 13-OCT-1992; 92US-00962569.
XX
PA (COLS) UNIV COLORADO FOUND INC.
XX
PI Ham RG, Jeffers KF, Menon RS, Chang Y;
XX
DR WPI; 1995-160470/21.
DR P-PSDB; AAR72699.
XX
PT DNA encoding human kappa-casein - used for the prodn. of large amts. of
PT highly purified kappa-casein milk protein for infant use.
XX
PS Example D; Col 11; 14pp; English.
XX
CC A commercial cDNA library prepd. in lambda gt11 from mRNA obtd. from
CC human breast tissue removed during the third trimester of pregnancy was
CC screened with rabbit anti-bovine kappa-casein cDNA. The cDNA insert of a
CC recombinant phage was amplified by PCR using the lambda sequencing
CC primers given in AAQ89599-600 and the kappa-casein primer given in
CC AAQ89601 to obtain a clone encoding human kappa-casein
XX
SQ Sequence 17 BP; 4 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 179 GTCCAAGGCACATAT 193
|| | ||||||||||
Db 1 GTGCGAGGCACATAT 15

RESULT 989
AAT53541
ID AAT53541 standard; RNA; 17 BP.
XX
AC AAT53541;
XX
DT 25-MAR-2003 (revised)
DT 27-MAR-1997 (first entry)
XX
DE Rat ICAM hammerhead ribozyme target sequence (nt. position 1092).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
OS Rattus rattus.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.

PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 202; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
SQ Sequence 17 BP; 5 A; 3 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 73.3%; Pred. No. 5e+02;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 56 AGAGGAGTCTCTGCA 70
||||| |:|:| |||
Db 1 AGAGGGGUCUCAGCA 15

RESULT 990
AAT53575
ID AAT53575 standard; RNA; 17 BP.
XX
AC AAT53575;
XX
DT 25-MAR-2003 (revised)
DT 27-MAR-1997 (first entry)
XX
DE Rat ICAM hammerhead ribozyme target sequence (nt. position 1295).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
OS Rattus rattus.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 202; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
SQ Sequence 17 BP; 5 A; 3 C; 7 G; 0 T; 2 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 73.3%; Pred. No. 5e+02;
Matches 11; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 56 AGAGGAGTCTCTGCA 70
||||| |:|:| |||
Db 1 AGAGGGGUCUCAGCA 15

```
RESULT 991
AAT06812/c
ID   AAT06812 standard; DNA; 17 BP.
XX
AC   AAT06812;
XX
DT   02-JUL-1996  (first entry)
XX
DE   Probe A' (Set 9) for M. tuberculosis 16S rRNA gene nucleotides 721-760.
XX
KW   probe; modified ligase chain reaction; Mycobacterium tuberculosis;
KW   M. avium; M. intracellulare; M. kansasii; detection; diagnosis; ss.
XX
OS   Mycobacterium tuberculosis.
XX
PN   WO9531571-A2.
XX
PD   23-NOV-1995.
XX
PF   04-MAY-1995;   95WO-US005816.
XX
PR   13-MAY-1994;   94US-00223330.
XX
PA   (ABBO ) ABBOTT LAB.
XX
PI   Kratochvil JD,  Leckie GW,  Odonnell DL,  Solomon NA;
XX
DR   WPI; 1996-010956/01.
XX
PT   New probes for detection of Mycobacterium species - derived from the 16S
PT   ribosomal RNA gene, the protein antigen b gene and the 65 kD and 10 kD
PT   heat shock protein genes of M.tuberculosis.
XX
PS   Claim 2; Page 41; 60pp; English.
XX
CC   Probe set 9 (AAT06811-814) were selected to detect a target sequence in
CC   the 16S ribosomal RNA gene (nucleotides 721-760) of M. uberculosis. The
CC   probes were labelled with biotin and fluorescein. Set 9 as capable of
CC   detecting target DNA from several species of bacteria of the genus
CC   Mycobacterium. A modified ligase chain reaction was utilised which uses
CC   two pairs of probes designated A, B (primary probes) and A', B'
CC   (secondary probes). Probe pairs were directed to the same target strand
CC   and ultimately ligated to one another after annealing to the target
CC   strand. At least one of the probes of a pair had a modified end with
CC   respect to the point of ligation. The modified end had bases omitted to
CC   create a gap between one probe terminus and the next probe terminus when
CC   the pair was annealed to the target sequence. Other modified ends include
CC   a base mismatched with the target sequence. The presence of modified ends
CC   reduced the falsely positive signal created by blunt-end ligation of the
CC   complementary probe duplexes to one another in the absence of target.
CC   "Correction" of the modification, in a target dependent manner, was
CC   subsequently carried out to render the probes ligatable. Once ligated,
CC   the fused (reorganised) probe was dissociated (e.g. melted) from the
CC   target and, as with conventional LCR, the process was repeated for
CC   several cycles
XX
SQ   Sequence 17 BP; 2 A; 9 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        330 GCGGACGACCAGGGC 344
              |||| ||| ||||||
Db         15 GCGGGCGATCAGGGC 1


RESULT 992
AAT35286/c
ID   AAT35286 standard; DNA; 17 BP.
XX
AC   AAT35286;
XX
DT   09-DEC-1996  (first entry)
XX
DE   Chemokine receptor K5.5 primer K5-5D (sense).
XX
KW   Chemokine receptor K5.5; MIP-1-alpha; RANTES; MCP-1; allergy; atheroma;
KW   HIV; AIDS; graft rejection; stem cell; primer; ss.
XX
OS   Synthetic.
XX
PN   WO9623068-A1.
XX
PD   01-AUG-1996.
XX
PF   24-JAN-1996;   96WO-GB000143.
XX
PR   27-JAN-1995;   95GB-00001683.
XX
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Wells TNC,  Power CA;
XX
DR   WPI; 1996-362692/36.
XX
PT   Chemokine receptor which binds MIP-1-alpha, RANTES and/or MCP-1 - useful
PT   in screening for agents to treat asthma, hay fever, eczema, allergies,
PT   atopic dermatitis, rhinitis or conjunctivits.
XX
PS   Example; Fig 2; 47pp; English.
XX
CC   A set of internal sequencing primers (AAT35281-91) were used to sequence
CC   cDNA clone E1-C19 (see also AAT35277), which codes for chemokine receptor
CC   K5.5 (AAR99274). They were designed on the basis of previous sequencing
CC   results
XX
SQ   Sequence 17 BP; 3 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        294 GTGAAGGACCTGAGC 308
              || | ||||||||||
Db         15 GTCATGGACCTGAGC 1


RESULT 993
AAT06537/c
ID   AAT06537 standard; DNA; 17 BP.
XX
AC   AAT06537;
XX
DT   25-MAR-2003  (revised)
DT   02-JUL-1996  (first entry)
XX
DE   Probe A' (Set 9) for M. tuberculosis 16S rRNA gene nucleotides 721-760.
XX
KW   probe; modified ligase chain reaction; Mycobacterium tuberculosis;
KW   M. avium; M. intracellulare; M. kansasii; detection; diagnosis; ss.
XX
OS   Mycobacterium tuberculosis.
XX
PN   WO9531570-A1.
XX
PD   23-NOV-1995.
XX
PF   04-MAY-1995;   95WO-US005602.
XX
PR   13-MAY-1994;   94US-00242403.
XX
PA   (ABBO ) ABBOTT LAB.
XX
PI   Leckie GW,  Davis AH,  Semplefacey IE,  Manlove MT,  Solomon NA;
```

XX
DR WPI; 1996-010955/01.
XX
PT New probes for detection of M.tuberculosis - derived from e.g. the gene
PT coding for protein antigen b and from the insertion-like element IS6110
PT of M.tuberculosis.
XX
PS Example 8; Page 41; 60pp; English.
XX
CC Probe set 9 (AAT06536-539) were selected to detect a target sequence in
CC the 16S ribosomal RNA gene (nucleotides 721-760) of M. uberculosis. The
CC probes were labelled with biotin and fluorescein. Set 9 as capable of
CC detecting target DNA from several species of bacteria of the genus
CC Mycobacterium. A modified ligase chain reaction was utilised which uses
CC two pairs of probes designated A, B (primary probes) and A', B'
CC (secondary probes). Probe pairs were directed to the same target strand
CC and ultimately ligated to one another after annealing to the target
CC strand. At least one of the probes of a pair had a modified end with
CC respect to the point of ligation. The modified end had bases omitted to
CC create a gap between one probe terminus and the next probe terminus when
CC the pair was annealed to the target sequence. Other modified ends include
CC a base mismatched with the target sequence. The presence of modified ends
CC reduced the falsely positive signal created by blunt-end ligation of the
CC complementary probe duplexes to one another in the absence of target.
CC "Correction" of the modification, in a target dependent manner, was
CC subsequently carried out to render the probes ligatable. Once ligated,
CC the fused (reorganised) probe was dissociated (e.g. melted) from the
CC target and, as with conventional LCR, the process was repeated for
CC several cycles. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 17 BP; 2 A; 9 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 330 GCGGACGACCAGGGC 344
|||| ||| ||||||
Db 15 GCGGGCGATCAGGGC 1

RESULT 994
AAT62817
ID AAT62817 standard; DNA; 17 BP.
XX
AC AAT62817;
XX
DT 18-NOV-1997 (first entry)
XX
DE Primer MGHR1 for murine growth hormone cDNA.
XX
KW Primer; polymerase chain reaction; PCR; amplification; murine; mouse;
KW growth hormone; transformation; stem cell; mammal; transformed organism;
KW increased growth; continuous expression; improvement; body weight;
KW milk production; ss.
XX
OS Synthetic.
XX
PN WO9708947-A1.
XX
PD 13-MAR-1997.
XX
PF 28-AUG-1996; 96WO-JP002402.
XX
PR 08-SEP-1995; 95JP-00231086.
XX
PA (TAKI) TAKARA SHUZO CO LTD.
XX
PI Okado T, Zhang Y, Matsushita H, Asada K, Kato I;
XX
DR WPI; 1997-192587/17.
XX
PT Organisms transformed by growth hormone gene - for producing higher body
PT weight, faster growing specimens.
XX
PS Example 1; Page 22; 39pp; Japanese.
XX
CC The present sequence is a primer for the PCR amplification of murine
CC growth hormone (mGH) cDNA, which was used to transform a stem cell, which
CC in turn was introduced into an organism to produce a transformed
CC organism. The transformed organism exhibits increased growth, and as the
CC growth hormone gene is expressed continuously, it can be grown very
CC quickly. The resulting organism, specifically a mammal, shows improved
CC body weight and milk production
XX
SQ Sequence 17 BP; 4 A; 3 C; 10 G; 0 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 GGAGCAGGGCGGCAC 286
|| |||||| |||||
Db 1 GGGGCAGGGAGGCAC 15

RESULT 995
AAX68713/c
ID AAX68713 standard; RNA; 17 BP.
XX
AC AAX68713;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human flt1 VEGF receptor hammerhead ribozyme substrate #8.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.
PR 11-JAN-1996; 96US-00584040.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (CHIR) CHIRON CORP.
XX
PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
XX
DR WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
PS Claim 4; Page 46; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention

```
XX
SQ   Sequence 17 BP; 1 A; 5 C; 9 G; 0 T; 2 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        299 GGACCTGAGCCCCGG 313
              | ||| |||||||||
Db         15 GCACCCGAGCCCCGG 1


RESULT 996
AAX69246/c
ID   AAX69246 standard; RNA; 17 BP.
XX
AC   AAX69246;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human flt1 VEGF receptor hammerhead ribozyme substrate #541.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 63; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        247 TCCCGGGCTCGGCCA 261
              ||||||||  |||||
Db         17 TCCCGGGCAAGGCCA 3


RESULT 997
AAX68723/c
ID   AAX68723 standard; RNA; 17 BP.
XX
AC   AAX68723;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human flt1 VEGF receptor hammerhead ribozyme substrate #18.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 47; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 1 A; 8 C; 6 G; 0 T; 2 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        411 GTGATCGAGACGCGG 425
              |||| || |||||||
Db         17 GTGAGCGCGACGCGG 3


RESULT 998
AAX74473/c
ID   AAX74473 standard; RNA; 17 BP.
XX
AC   AAX74473;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #1.
XX
```

```
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 155; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 1 A; 7 C; 5 G; 0 T; 4 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         411 GTGATCGAGACGCGG 425
               |||| | ||||||||
Db          17 GTGAGCAAGACGCGG 3


RESULT 999
AAX69044
ID   AAX69044 standard; RNA; 17 BP.
XX
AC   AAX69044;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human flt1 VEGF receptor hammerhead ribozyme substrate #339.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 56; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 6 A; 4 C; 4 G; 0 T; 3 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   73.3%;  Pred. No. 5e+02;
  Matches   11;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy          43 ATGGCCACCACTCAG 57
               |:||||| |||: ||
Db           1 AUGGCCAUCACUAAG 15


RESULT 1000
AAX74474/c
ID   AAX74474 standard; RNA; 17 BP.
XX
AC   AAX74474;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #2.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
```

```
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 155; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 2 A; 8 C; 3 G; 0 T; 4 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        411 GTGATCGAGACGCGG 425
              |||| | ||||||||
Db         15 GTGAGCAAGACGCGG 1


RESULT 1001
AAT76176
ID   AAT76176 standard; DNA; 17 BP.
XX
AC   AAT76176;
XX
DT   12-SEP-1997  (first entry)
XX
DE   Human IL3 receptor antisense oligonucleotide.
XX
KW   Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW   chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS   Synthetic.
XX
PN   WO9640162-A1.
XX
PD   19-DEC-1996.
XX
PF   06-JUN-1996;   96WO-US009306.
XX
PR   07-JUN-1995;   95US-00474497.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW,  Metzger WJ;
XX
DR   WPI; 1997-051871/05.
XX
PT   Treatment of airway diseases such as asthma - by topically applying
PT   adenosine-free antisense oligo:nucleotide to airway epithelium of
PT   subject.
XX
PS   Example 5; Page 29; 71pp; English.
XX
CC   A method for treating airway disease in a subject has been produced,
CC   which involves the topical administration of an essentially adenosine
CC   free antisense oligonucleotide (ON) to the airway epithelium of the
CC   subject. The present sequence is an antisense oligonucleotide specific
CC   for the human IL3 receptor. The method can be used to treat airway
CC   diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC   disease, bronchitis and other airway diseases characterised by an
CC   inflammatory response. By eliminating adenosine from the antisense ON,
CC   its liberation upon antisense degradation is prevented, thereby
CC   preventing adenosine-induced bronchoconstriction in patients with hyper-
CC   reactive airways
XX
SQ   Sequence 17 BP; 0 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        242 CTGCTTCCCGGGCTC 256
              ||  ||||||||||
Db          1 CTCTTTCCCGGGCTC 15


RESULT 1002
AAA22825
ID   AAA22825 standard; RNA; 17 BP.
XX
AC   AAA22825;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Integrin subunit beta 3 substrate sequence SEQ ID NO:6051.
XX
KW   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW   hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW   ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW   age related macular degeneration; inflammation; neovascular glaucoma;
KW   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW   tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW   Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   WO9950403-A2.
XX
PD   07-OCT-1999.
XX
PF   24-MAR-1999;   99WO-US006507.
XX
PR   27-MAR-1998;   98US-0079678P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Pavco PA,  Roberts E,  Jarvis T,  Coeshott C,  Mcswiggen JA;
XX
DR   WPI; 1999-591315/50.
XX
PT   Novel ribozymes for modulating the synthesis, expression and/or stability
PT   of an mRNA encoding an angiogenic factors.
XX
PS   Claim 54; Page 244; 305pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules with RNA
CC   cleaving activity, which specifically cleave RNA encoded by an aryl
CC   hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC   gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC   AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC   and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC   corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC   AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC   and AAA19155 to AAA19222 represent their corresponding target sequences;
CC   AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC   sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC   AAA21596 to AAA21688 represent their corresponding target sequences;
CC   AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
```

CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 0 A; 8 C; 4 G; 0 T; 5 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 5e+02;
Matches 10; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy 242 CTGCTTCCCGGGCTC 256
| ||::|||||| :|
Db 3 CCGCUUCCCGGGUUC 17

RESULT 1003
AAA22832/c
ID AAA22832 standard; RNA; 17 BP.
XX
AC AAA22832;
XX
DT 19-JUN-2000 (first entry)
XX
DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6058.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 54; Page 245; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 3 A; 7 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 230 CAAATCGGGAGGCTG 244
| | ||||||||||||
Db 17 CTACTCGGGAGGCTG 3

RESULT 1004
AAA21483/c
ID AAA21483 standard; RNA; 17 BP.
XX
AC AAA21483;
XX
DT 19-JUN-2000 (first entry)
XX
DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:4709.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 55; Page 211; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to

CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 6 A; 1 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 187 CACATATCCACTGCT 201
||||||| || ||||
Db 15 CACATATACAATGCT 1

RESULT 1005
AAA22734/c
ID AAA22734 standard; RNA; 17 BP.
XX
AC AAA22734;
XX
DT 19-JUN-2000 (first entry)
XX
DE Integrin subunit beta 3 substrate sequence SEQ ID NO:5960.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 54; Page 239; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 3 A; 7 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 230 CAAATCGGGAGGCTG 244
| | ||||||||||||
Db 17 CTACTCGGGAGGCTG 3

RESULT 1006
AAX53973
ID AAX53973 standard; DNA; 17 BP.
XX
AC AAX53973;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human IL-3 receptor antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 1999-229400/19.
XX

```
PT   New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT   vasoconstriction.
XX
PS   Disclosure; Page 48; 120pp; English.
XX
CC   The specification describes antisense oligonucleotides (AAX52869-X55271)
CC   directed against at least 2 mRNAs selected from target genes, coding and
CC   non-coding regions of RNAs corresponding to target genes, gene initiation
CC   codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC   -end and the juxta-section between coding and non-coding regions and all
CC   segments of RNAs encoding proteins associated with one or more diseases,
CC   conditions or mixtures. The antisense oligonucleotides may be derived
CC   from sequences AAX55272-74. These multiple target oligonucleotides
CC   (specifically AAX55180-271) can be used for the antisense treatment of
CC   diseases and conditions. Typical diseases and conditions are those
CC   associated with impaired respiration and inflammation, including lung
CC   diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC   acute asthma, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC   pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC   disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC   colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC   hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC   well as all types of cancers which may metastasize or have metastasized
CC   to the lungs, including breast and prostate cancer
XX
SQ   Sequence 17 BP; 0 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        242 CTGCTTCCCGGGCTC 256
              ||  ||||||||||
Db          1 CTCTTTCCCGGGCTC 15


RESULT 1007
AAV72257/c
ID   AAV72257 standard; DNA; 17 BP.
XX
AC   AAV72257;
XX
DT   24-MAY-1999  (first entry)
XX
DE   S. cerevisiae galactose metabolism gene promoter Gal4 binding site.
XX
KW   Gal4 binding site; gene expression regulation; transgenic plant;
KW   chimeric; promoter; DNA binding domain; plant disease resistance;
KW   pest resistance; grain quality; oil composition; starch composition;
KW   protein composition; transcription factor; seed storage protein;
KW   multiple transgene regulation; tissue-specific promoter;
KW   developmentally regulated promoter; ss.
XX
OS   Saccharomyces cerevisiae.
XX
PN   WO9859062-A1.
XX
PD   30-DEC-1998.
XX
PF   23-JUN-1998;   98WO-US013006.
XX
PR   24-JUN-1997;   97US-00881687.
XX
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI   Liu Z,  Odell JT;
XX
DR   WPI; 1999-105629/09.
XX
PT   Regulating gene expression in a stably transformed transgenic plant cell
PT   - useful for improving plant disease and pest resistance, and grain
PT   quality.
XX
PS   Disclosure; Page 31; 75pp; English.
XX
CC   This sequence is used to describe a method for regulating gene expression
CC   in a stably transformed transgenic plant cell. The method comprises
CC   introducing two chimeric genes (5' to 3') into the plant cell genome. The
CC   first gene comprises a promoter operably linked to a Gal4 binding
CC   sequence and a coding sequence (including complementary sequences), which
CC   is itself linked to a polyadenylation signal sequence. The Gal4 sequence
CC   is located upstream of the promoter if a minimal promoter is used. The
CC   second chimeric gene comprises a promoter, and a DNA sequence encoding a
CC   DNA binding domain of Gal4 transcriptional activator, which is operably
CC   linked to a DNA sequence encoding a transcriptional activation domain.
CC   This sequence is itself operably linked to a polyadenylation signal
CC   sequence. The expression of the second chimeric gene regulates the
CC   expression of the first chimeric gene. The method is useful for improving
CC   plant disease and pest resistance, in addition to grain quality (e.g.
CC   Oil, starch or protein composition). The method (using the Gal4 chimeric
CC   transcription factor) achieves a higher level of expression when compared
CC   to the level using the highly expressed seed storage protein gene
CC   promoter. It also achieves activation of expression in grain, control of
CC   multiple transgene regulation, and amplification of the expression level
CC   while maintaining the expression pattern of a tissue-specific or
CC   developmentally regulated promoter
XX
SQ   Sequence 17 BP; 1 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        272 GGAGCAGGGCGGCAC 286
              ||||||| ||||| |
Db         16 GGAGCAGTGCGGCGC 2


RESULT 1008
AAA33417
ID   AAA33417 standard; DNA; 17 BP.
XX
AC   AAA33417;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Low adenosine antisense oligonucleotide SEQ ID NO:1106.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US017712.
XX
PR   03-AUG-1998;   98US-0095212P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstruction, inflammation, allergies, asthma, hypertension,
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```
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers.
XX
PS   Claim 18; Page 403; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an antisense
CC   oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC   nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC   impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC   sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC   from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC   AAA33992) are specifically claimed ONs from the present invention. N.B.
CC   Sequences given in the disclosure of the present invention do not match
CC   up with their corresponding SEQ ID NO: sequences given in the sequence
CC   listing
XX
SQ   Sequence 17 BP; 0 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        242 CTGCTTCCCGGGCTC 256
              ||  ||||||||||
Db          1 CTCTTTCCCGGGCTC 15


RESULT 1009
AAF19539
ID   AAF19539 standard; DNA; 17 BP.
XX
AC   AAF19539;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human IL3 receptor polynucleotide fragment #1106.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008020.
XX
PR   06-APR-1999;   99US-0127958P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not trigger
PT   adenosine receptors during metabolism, useful e.g. for treating cancers
PT   and respiratory obstructions.
XX
PS   Claim 14; Page 207; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC   surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention
XX
SQ   Sequence 17 BP; 0 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        242 CTGCTTCCCGGGCTC 256
              ||  ||||||||||
Db          1 CTCTTTCCCGGGCTC 15


RESULT 1010
AAA25624/c
ID   AAA25624 standard; DNA; 17 BP.
XX
AC   AAA25624;
XX
DT   19-JUL-2000  (first entry)
XX
DE   Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2122.
XX
KW   Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW   hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW   gene expression modification; cancer; phosphorothioate; endonuclease;
KW   anticancer; breast cancer; endometrium cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954459-A2.
XX
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PD 28-OCT-1999.
XX
PF 19-APR-1999; 99WO-US008547.
XX
PR 20-APR-1998; 98US-0082404P.
PR 23-JUN-1998; 98US-00103636.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;
PI Matulic-Adamic J;
XX
DR WPI; 2000-013248/01.
XX
PT New nucleic acids that interact, and optionally cleave, target sequences,
PT used to treat cancer.
XX
PS Claim 77; Page 85; 148pp; English.
XX
CC The present invention describes nucleic acids (A) that interact stably
CC with a target sequence and contain at least one phosphoro(di)thioate
CC link, having endonuclease activity. (A), and more generally any catalytic
CC nucleic acid (A') that modulates expression of the oestrogen receptor
CC gene, are used to treat cancer (particularly of breast or endometrium),
CC in vivo or by transforming cells ex vivo and implanting treated cells, or
CC for other conditions associated with levels of oestrogen receptor.
CC Because of the high selectivity for targeted RNA, (A) can also be used to
CC correlate inhibition of gene expression with alterations in phenotype,
CC particularly for identification of therapeutic targets, and as research
CC reagents (for RNA, in the same way that restriction endonucleases are
CC used with DNA). The combination of modifications in (A) improves
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC AAA24748 to AAA25992 represent their corresponding target sequences.
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC sequences, and AAA26107 to AAA26218 represent their corresponding target
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC antisense oligonucleotides used in the exemplification of the present
CC invention
XX
SQ Sequence 17 BP; 1 A; 10 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        201 TCGGTGAAAGCAGAG 215
              | || ||||||||||
Db         16 TGGGGGAAAGCAGAG 2
```

RESULT 1011
AAA24803/c
ID AAA24803 standard; DNA; 17 BP.
XX
AC AAA24803;
XX
DT 19-JUL-2000 (first entry)
XX
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1301.
XX
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW gene expression modification; cancer; phosphorothioate; endonuclease;
KW anticancer; breast cancer; endometrium cancer; ss.
XX
OS Homo sapiens.
XX
PN WO9954459-A2.
XX
PD 28-OCT-1999.
XX
PF 19-APR-1999; 99WO-US008547.
XX
PR 20-APR-1998; 98US-0082404P.
PR 23-JUN-1998; 98US-00103636.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;
PI Matulic-Adamic J;
XX
DR WPI; 2000-013248/01.
XX
PT New nucleic acids that interact, and optionally cleave, target sequences,
PT used to treat cancer.
XX
PS Claim 77; Page 58; 148pp; English.
XX
CC The present invention describes nucleic acids (A) that interact stably
CC with a target sequence and contain at least one phosphoro(di)thioate
CC link, having endonuclease activity. (A), and more generally any catalytic
CC nucleic acid (A') that modulates expression of the oestrogen receptor
CC gene, are used to treat cancer (particularly of breast or endometrium),
CC in vivo or by transforming cells ex vivo and implanting treated cells, or
CC for other conditions associated with levels of oestrogen receptor.
CC Because of the high selectivity for targeted RNA, (A) can also be used to
CC correlate inhibition of gene expression with alterations in phenotype,
CC particularly for identification of therapeutic targets, and as research
CC reagents (for RNA, in the same way that restriction endonucleases are
CC used with DNA). The combination of modifications in (A) improves
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC AAA24748 to AAA25992 represent their corresponding target sequences.
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC sequences, and AAA26107 to AAA26218 represent their corresponding target
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC antisense oligonucleotides used in the exemplification of the present
CC invention
XX
SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        215 GAACTCGGTGGCGGC 229
              ||||||| ||||||
Db         16 GAACTCGTAGGCGGC 2
```

RESULT 1012
AAA24804
ID AAA24804 standard; DNA; 17 BP.
XX
AC AAA24804;
XX
DT 19-JUL-2000 (first entry)
XX
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1302.
XX
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW gene expression modification; cancer; phosphorothioate; endonuclease;
KW anticancer; breast cancer; endometrium cancer; ss.
XX
OS Homo sapiens.
XX
PN WO9954459-A2.
XX
PD 28-OCT-1999.
XX
PF 19-APR-1999; 99WO-US008547.
XX

```
PR   20-APR-1998;   98US-0082404P.
PR   23-JUN-1998;   98US-00103636.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Thompson JD,  Beigelman L,  Mcswiggen JA,  Karpeisky A,  Bellon L;
PI   Reynolds M,  Zwick M,  Jarvis T,  Woolf T,  Haeberli P;
PI   Matulic-Adamic J;
XX
DR   WPI; 2000-013248/01.
XX
PT   New nucleic acids that interact, and optionally cleave, target sequences,
PT   used to treat cancer.
XX
PS   Claim 77; Page 58; 148pp; English.
XX
CC   The present invention describes nucleic acids (A) that interact stably
CC   with a target sequence and contain at least one phosphoro(di)thioate
CC   link, having endonuclease activity. (A), and more generally any catalytic
CC   nucleic acid (A') that modulates expression of the oestrogen receptor
CC   gene, are used to treat cancer (particularly of breast or endometrium),
CC   in vivo or by transforming cells ex vivo and implanting treated cells, or
CC   for other conditions associated with levels of oestrogen receptor.
CC   Because of the high selectivity for targeted RNA, (A) can also be used to
CC   correlate inhibition of gene expression with alterations in phenotype,
CC   particularly for identification of therapeutic targets, and as research
CC   reagents (for RNA, in the same way that restriction endonucleases are
CC   used with DNA). The combination of modifications in (A) improves
CC   resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC   AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC   AAA24748 to AAA25992 represent their corresponding target sequences.
CC   AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC   sequences, and AAA26107 to AAA26218 represent their corresponding target
CC   sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC   antisense oligonucleotides used in the exemplification of the present
CC   invention
XX
SQ   Sequence 17 BP; 4 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        173 CTACGAGTCCAAGGC 187
              ||||||||  ||| ||
Db          1 CTACGAGTTCAACGC 15


RESULT 1013
AAA25625/c
ID   AAA25625 standard; DNA; 17 BP.
XX
AC   AAA25625;
XX
DT   19-JUL-2000  (first entry)
XX
DE   Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2123.
XX
KW   Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW   hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW   gene expression modification; cancer; phosphorothioate; endonuclease;
KW   anticancer; breast cancer; endometrium cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954459-A2.
XX
PD   28-OCT-1999.
XX
PF   19-APR-1999;   99WO-US008547.
XX
PR   20-APR-1998;   98US-0082404P.
PR   23-JUN-1998;   98US-00103636.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Thompson JD,  Beigelman L,  Mcswiggen JA,  Karpeisky A,  Bellon L;
PI   Reynolds M,  Zwick M,  Jarvis T,  Woolf T,  Haeberli P;
PI   Matulic-Adamic J;
XX
DR   WPI; 2000-013248/01.
XX
PT   New nucleic acids that interact, and optionally cleave, target sequences,
PT   used to treat cancer.
XX
PS   Claim 77; Page 85; 148pp; English.
XX
CC   The present invention describes nucleic acids (A) that interact stably
CC   with a target sequence and contain at least one phosphoro(di)thioate
CC   link, having endonuclease activity. (A), and more generally any catalytic
CC   nucleic acid (A') that modulates expression of the oestrogen receptor
CC   gene, are used to treat cancer (particularly of breast or endometrium),
CC   in vivo or by transforming cells ex vivo and implanting treated cells, or
CC   for other conditions associated with levels of oestrogen receptor.
CC   Because of the high selectivity for targeted RNA, (A) can also be used to
CC   correlate inhibition of gene expression with alterations in phenotype,
CC   particularly for identification of therapeutic targets, and as research
CC   reagents (for RNA, in the same way that restriction endonucleases are
CC   used with DNA). The combination of modifications in (A) improves
CC   resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC   AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC   AAA24748 to AAA25992 represent their corresponding target sequences.
CC   AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC   sequences, and AAA26107 to AAA26218 represent their corresponding target
CC   sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC   antisense oligonucleotides used in the exemplification of the present
CC   invention
XX
SQ   Sequence 17 BP; 1 A; 9 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        201 TCGGTGAAAGCAGAG 215
              | || ||||||||||
Db         15 TGGGGGAAAGCAGAG 1


RESULT 1014
AAC70195
ID   AAC70195 standard; DNA; 17 BP.
XX
AC   AAC70195;
XX
DT   09-FEB-2001  (first entry)
XX
DE   Single nucleotide polymorphism PCR primer #17.
XX
KW   Single nucleotide polymorphism; SNP; human; genetic disease;
KW   disease susceptibility; cardiovascular system; endocrine system;
KW   neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200058519-A2.
XX
PD   05-OCT-2000.
XX
PF   30-MAR-2000; 2000WO-US008440.
XX
PR   31-MAR-1999;   99US-0127248P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (AFFY-) AFFYMETRIX INC.
XX
```

PI Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX
DR WPI; 2000-611722/58.
XX
PT Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
PS Claim 8; Fig 5; 214pp; English.
XX
CC The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX
SQ Sequence 17 BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 314 GGACCGCGTGCTGGC 328
|||||| | ||||||
Db 3 GGACCGTGAGCTGGC 17

RESULT 1015
AAC70192
ID AAC70192 standard; DNA; 17 BP.
XX
AC AAC70192;
XX
DT 09-FEB-2001 (first entry)
XX
DE Single nucleotide polymorphism PCR primer #15.
XX
KW Single nucleotide polymorphism; SNP; human; genetic disease;
KW disease susceptibility; cardiovascular system; endocrine system;
KW neurological system; forensic testing; paternity testing; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200058519-A2.
XX
PD 05-OCT-2000.
XX
PF 30-MAR-2000; 2000WO-US008440.
XX
PR 31-MAR-1999; 99US-0127248P.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (AFFY-) AFFYMETRIX INC.
XX
PI Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
PI Lipshutz RJ, Patil N, Sklar P;
XX
DR WPI; 2000-611722/58.
XX
PT Nucleic acid selected from one of 106 genes comprising single nucleotide
PT polymorphisms, allele-specific oligonucleotides to the genes are useful
PT for phenotypic correlations, forensics, paternity testing, medicine and
PT genetic analysis.
XX
PS Claim 8; Fig 5; 214pp; English.
XX
CC The present invention is concerned with a number of human single
CC nucleotide polymorphisms (SNPs) which the inventors identified in human
CC genes. These SNPs can be used in disease diagnosis and prediction of an
CC individual's susceptibility to disease, in forensic and paternity testing
CC and in genetic mapping. In particular, the SNPs of the invention can be
CC used to diagnose susceptibility to diseases of the cardiovascular,
CC endocrine and neurological systems, such as coronary artery disease,
CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
CC diseases
XX
SQ Sequence 17 BP; 3 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 314 GGACCGCGTGCTGGC 328
|||||| | ||||||
Db 3 GGACCGTGAGCTGGC 17

RESULT 1016
AAF06942
ID AAF06942 standard; DNA; 17 BP.
XX
AC AAF06942;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #3199.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX
PS Claim 54; Page 130; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX
SQ Sequence 17 BP; 6 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 212 AGAGAACTCGGTGGC 226
|||||||||| || |
Db 1 AGAGAACTCGATGCC 15

```
RESULT 1017
AAF02141/c
ID   AAF02141 standard; DNA; 17 BP.
XX
AC   AAF02141;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #436.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 37; Page 65; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 2 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match              2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        299 GGACCTGAGCCCCGG 313
              ||||||||| ||| |
Db         17 GGACCTGAGACCCAG 3


RESULT 1018
AAF02142/c
ID   AAF02142 standard; DNA; 17 BP.
XX
AC   AAF02142;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #437.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 37; Page 65; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 2 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match              2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        299 GGACCTGAGCCCCGG 313
              ||||||||| ||| |
Db         15 GGACCTGAGACCCAG 1


RESULT 1019
AAF05333
ID   AAF05333 standard; DNA; 17 BP.
XX
AC   AAF05333;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #2552.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 18; Page 114; 164pp; English.
```

XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX
SQ Sequence 17 BP; 1 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 348 CTGCTCTACAGCGAC 362
||||||| ||||| |
Db 2 CTGCTCTTCAGCGCC 16

RESULT 1020
ABK00045/c
ID ABK00045 standard; RNA; 17 BP.
XX
AC ABK00045;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Hammerhead Ribozyme #45.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 66; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a hammerhead ribozyme of the invention
XX
SQ Sequence 17 BP; 0 A; 12 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 143 GGCGGTGGAGGCCGG 157
|| || |||||||||
Db 16 GGAGGGGGAGGCCGG 2

RESULT 1021
ABK00895/c
ID ABK00895 standard; RNA; 17 BP.
XX
AC ABK00895;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Inozyme #165.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX

PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 80; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 0 A; 12 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 143 GGCGGTGGAGGCCGG 157
|| || |||||||||
Db 15 GGAGGGGGAGGCCGG 1

RESULT 1022
ABK01170/c
ID ABK01170 standard; RNA; 17 BP.
XX
AC ABK01170;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Inozyme #440.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 85; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease

CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 2 A; 7 C; 2 G; 0 T; 6 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 286 CCAAGCTGGTGAAGG 300
| || ||||||||||
Db 15 CAAAACTGGTGAAGG 1

RESULT 1023
ABK00894/c
ID ABK00894 standard; RNA; 17 BP.
XX
AC ABK00894;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Inozyme #164.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 80; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 0 A; 12 C; 3 G; 0 T; 2 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 143 GGCGGTGGAGGCCGG 157
|| || |||||||||
Db 17 GGAGGGGGAGGCCGG 3

RESULT 1024
ABA77649
ID ABA77649 standard; DNA; 17 BP.
XX
AC ABA77649;
XX
DT 24-JAN-2002 (first entry)
XX
DE Beta globin mutation correcting oligonucleotide SEQ ID NO: 495.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;

XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 73; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 337 ACCAGGGCCGGCTGC 351
||||| || ||||||
Db 2 ACCAGTGCAGGCTGC 16

RESULT 1025
ABA77650/c
ID ABA77650 standard; DNA; 17 BP.
XX
AC ABA77650;
XX
DT 24-JAN-2002 (first entry)
XX
DE Beta globin mutation correcting oligonucleotide SEQ ID NO: 496.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.
XX
PI Kmiec EB, Gamper HB, Rice MC;
XX
DR WPI; 2001-639230/73.
XX
PT Oligonucleotide for targeted alterations of genetic sequences and for
PT treating cystic fibrosis, comprises at least one mismatch and chemical
PT modification.
XX
PS Claim 7; Page 73; 294pp; English.
XX
CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 337 ACCAGGGCCGGCTGC 351
||||| || ||||||
Db 16 ACCAGTGCAGGCTGC 2

RESULT 1026
ABA77645
ID ABA77645 standard; DNA; 17 BP.
XX
AC ABA77645;
XX
DT 24-JAN-2002 (first entry)
XX
DE Beta globin mutation correcting oligonucleotide SEQ ID NO: 491.
XX
KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW antilipemic; ss.
XX
OS Homo sapiens.
XX
PN WO200173002-A2.
XX
PD 04-OCT-2001.
XX
PF 27-MAR-2001; 2001WO-US009761.
XX
PR 27-MAR-2000; 2000US-0192176P.
PR 27-MAR-2000; 2000US-0192179P.
PR 01-JUN-2000; 2000US-0208538P.
PR 30-OCT-2000; 2000US-0244989P.
XX
PA (UYDE) UNIV DELAWARE.

```
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification.
XX
PS   Claim 7; Page 73; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention
XX
SQ   Sequence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        337 ACCAGGGCCGGCTGC 351
              ||||| || ||||||
Db          1 ACCAGTGCAGGCTGC 15


RESULT 1027
ABA77646/c
ID   ABA77646 standard; DNA; 17 BP.
XX
AC   ABA77646;
XX
DT   24-JAN-2002  (first entry)
XX
DE   Beta globin mutation correcting oligonucleotide SEQ ID NO: 492.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US009761.
XX
PR   27-MAR-2000; 2000US-0192176P.
PR   27-MAR-2000; 2000US-0192179P.
PR   01-JUN-2000; 2000US-0208538P.
PR   30-OCT-2000; 2000US-0244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification.
XX
PS   Claim 7; Page 73; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention
XX
SQ   Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        337 ACCAGGGCCGGCTGC 351
              ||||| || ||||||
Db         17 ACCAGTGCAGGCTGC 3


RESULT 1028
AAH24022/c
ID   AAH24022 standard; DNA; 17 BP.
XX
AC   AAH24022;
XX
DT   29-AUG-2001  (first entry)
XX
DE   Yeast GAL1/GAL10 promoter UASgal site, SEQ ID NO:5.
XX
KW   UASgal site; cis-acting transcription control element; Gal4; Gal3; Gal80;
KW   stoichiometrically balanced expression; yeast;
KW   galactose-inducible expression; expression construct; promoter; GAL1;
KW   GAL10; ds.
XX
OS   Saccharomyces cerevisiae.
XX
PN   US6221630-B1.
XX
PD   24-APR-2001.
XX
PF   24-MAR-1999;   99US-00275680.
XX
PR   24-MAR-1999;   99US-00275680.
XX
PA   (PENN-) PENN STATE RES FOUND.
XX
PI   Hopper JE;
XX
DR   WPI; 2001-307557/32.
XX
PT   Expression construct for inducing and sustaining high level recombinant
PT   polypeptide production in yeast, comprises nucleic acids encoding a trans
```

PT -acting transcription factor, selectable marker and yeast origin of
PT replication.
XX
PS Disclosure; Col 15; 22pp; English.
XX
CC The invention relates to high copy number expression constructs for high
CC level polypeptide expression in yeast. The yeast expression constructs
CC comprise a nucleic acid sequence encoding a set of trans- acting
CC transcription factors, a nucleic acid encoding a yeast selectable marker
CC providing an inefficiently or efficiently selected phenotype, a nucleic
CC acid encoding a yeast or bacterial origin of replication (ori), and a
CC unique restriction site downstream of a promoter containing a cis- acting
CC transcription control element that is regulated by the transcription
CC factors which are encoded by the expression construct. In a specific
CC embodiment of the invention, the expression construct provides for
CC galactose-inducible protein expression. Such constructs contain DNA
CC encoding the transcription factors Gal3, Gal4 and Gal80, and a UASgal cis
CC -acting control element within the promoter which drives expression of
CC the inserted gene of interest. The vector-encoded transcription factors
CC are expressed in stoichiometrically-balanced amounts, which is
CC particularly important for a galactose-inducible system, as Gal4, when
CC not balanced by stoichiometric levels of Gal3 and Gal80, becomes a
CC constitutive transcription factor, and can become toxic to the cell. The
CC constructs of the invention express the transcription factors at levels
CC higher than those found in native yeast cells, thereby ensuring
CC expression of the gene of interest. The expression constructs provide
CC robust, high level expression of a gene of interest (which can encode an
CC endogenous or heterologous polypeptide) in yeast. Sequences AAH24019-
CC AAH24035 represent actual UASgal sites found within the promoters of
CC various yeast galactose-inducible genes which may be used as the cis-
CC acting control element in a galactose-inducible expression construct of
CC the invention
XX
SQ Sequence 17 BP; 1 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 GGAGCAGGGCGGCAC 286
||||||| ||||| |
Db 16 GGAGCAGTGCGGCGC 2

RESULT 1029
ABN06222/c
ID ABN06222 standard; DNA; 17 BP.
XX
AC ABN06222;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6214.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 6214; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 4 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 291 CTGGTGAAGGACCTG 305
||| || ||||||||
Db 16 CTGTTGCAGGACCTG 2

RESULT 1030
ABN07566
ID ABN07566 standard; DNA; 17 BP.
XX
AC ABN07566;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7558.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX

PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 7558; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 5 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 385 ACGACGGCGCCAAGA 399
| ||||| ||||||| |
Db 3 ATGACGGGGCCAAGA 17

RESULT 1031
ABN05995/c
ID ABN05995 standard; DNA; 17 BP.
XX
AC ABN05995;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:5987.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 5987; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 5 A; 2 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 355 ACAGCGACTTCCTCA 369

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                   ||| ||||||||||
Db          17 ACATGGACTTCCTCA 3


RESULT 1032
ABN10476
ID   ABN10476 standard; DNA; 17 BP.
XX
AC   ABN10476;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10468.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 10468; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 1 A; 3 C; 10 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         16 TGCGGGTGACCGAGG 30
              |||||||||| | ||
Db          1 TGCGGGTGACGGTGG 15


RESULT 1033
ABN07572
ID   ABN07572 standard; DNA; 17 BP.
XX
AC   ABN07572;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7564.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 7564; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
```

CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 5 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 389 CGGCGCCAAGAAGGT 403
||| |||||||||| |
Db 1 CGGGGCCAAGAAGAT 15

RESULT 1034
ABN08151
ID ABN08151 standard; DNA; 17 BP.
XX
AC ABN08151;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8143.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS Disclosure; SEQ ID NO 8143; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMLP-1, in particular heart
CC and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 6 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 2.8%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 265 TGCACCTGGAGCAGG 279
|||| |||||||| |
Db 3 TGCAGCTGGAGCAAG 17

RESULT 1035
ABN10475
ID ABN10475 standard; DNA; 17 BP.
XX
AC ABN10475;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10467.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.

```
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 10467; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 1 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         16 TGCGGGTGACCGAGG 30
              |||||||||| | ||
Db          2 TGCGGGTGACGGTGG 16


RESULT 1036
ABN06001/c
ID   ABN06001 standard; DNA; 17 BP.
XX
AC   ABN06001;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:5993.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 5993; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 5 A; 2 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        351 CTCTACAGCGACTTC 365
              |||||| ||||||
Db         15 CTCTACATGGACTTC 1


RESULT 1037
ABN08152
ID   ABN08152 standard; DNA; 17 BP.
XX
AC   ABN08152;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8144.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
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OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 8144; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 6 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        265 TGCACCTGGAGCAGG 279
              |||| |||||||| |
Db          2 TGCAGCTGGAGCAAG 16


RESULT 1038
ABN06469
ID   ABN06469 standard; DNA; 17 BP.
XX
AC   ABN06469;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6461.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 6461; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
```

```
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        191 TATCCACTGCTCGGT 205
              ||||||||||  |||
Db          3 TATCCACTGCCTGGT 17


RESULT 1039
ABN06223/c
ID   ABN06223 standard; DNA; 17 BP.
XX
AC   ABN06223;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6215.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 6215; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 4 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        291 CTGGTGAAGGACCTG 305
              ||| || ||||||||
Db         15 CTGTTGCAGGACCTG 1


RESULT 1040
ABN06471
ID   ABN06471 standard; DNA; 17 BP.
XX
AC   ABN06471;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6463.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 6463; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
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CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        191 TATCCACTGCTCGGT 205
              ||||||||||  |||
Db          1 TATCCACTGCCTGGT 15


RESULT 1041
ABN01016
ID   ABN01016 standard; DNA; 17 BP.
XX
AC   ABN01016;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1008.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
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PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 1008; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 8 A; 3 C; 6 G; 0 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        202 CGGTGAAAGCAGAGA 216
              | | ||||||||||
Db          3 CAGGGAAAGCAGAGA 17


RESULT 1042
ABN06470
ID   ABN06470 standard; DNA; 17 BP.
XX
AC   ABN06470;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6462.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
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PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 6462; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        191 TATCCACTGCTCGGT 205
              ||||||||||  |||
Db          2 TATCCACTGCCTGGT 16


RESULT 1043
ABN08153
ID   ABN08153 standard; DNA; 17 BP.
XX
AC   ABN08153;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8145.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 8145; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 5 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             2.8%;  Score 11.8;  DB 1;  Length 17;
  Best Local Similarity   86.7%;  Pred. No. 5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        265 TGCACCTGGAGCAGG 279
              |||| ||||||||  |
Db          1 TGCAGCTGGAGCAAG 15


RESULT 1044
ABN10474
ID   ABN10474 standard; DNA; 17 BP.
XX
AC   ABN10474;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10466.
XX
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